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Public Participation in Transportation Planning: How Does the Level of Engagement and Deliberation Affect Transportation Decisions in Virginia's MPOs?

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Public Participation in Transportation Planning: How Does the Level of Engagement and Deliberation Affect Transportation Decisions in Virginia's MPOs?

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University.

by

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ABSTRACT

PUBLIC PARTICIPATION IN TRANSPORTATION PLANNING: HOW DOES THE LEVEL OF ENGAGEMENT AND DELIBERATION AFFECT TRANSPORTATION DECISIONS IN VIRGINIA'S MPOs?

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University.

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Federal, state and local laws entitle the public to have an active role in the transportation decision making process. However, it remains difficult to engage the public in the long range planning process. The laws requiring public involvement are intentionally vague and don't prescribe specific approaches, so there is little consistency in public participation approaches and many state, regional, and local transportation agencies choose to do only what is necessary to meet minimum requirements (PBS&J, 2009). The purpose of this study is to examine public participation in transportation planning with specific focus on how the characteristics of public participation, the level of engagement, and deliberation affect the extent to which transportation planning decisions are reflective of public input received. A quantitatively driven mixed methods study was completed in three phases using secondary data, exclusively. Phase I included a review of each Metropolitan Planning Organization (MPO) and a study of the public involvement procedures that were used to develop each MPO's Metropolitan Transportation Plan (MTP). Phase II focused on the input that was gathered by each MPO for public participation

activities conducted during the development of the MTP. In Phase III, the results of Phases I and II were used to conduct a cross tabulation analysis to determine if there was a relationship between the characteristics of public participation, the level of engagement of participation, and the use of deliberation, and the degree to which public input was reflected in the MTP. The findings of this study indicate support for literature based in levels of engagement and the use of deliberation. Despite the design of the participation plan, transportation decisions reflect public input more often when MPOs have broad outreach to the public, higher levels of engagement, and use deliberative public participation techniques. Implications for policy and practice, and recommendations for future research are discussed.

CHAPTER 1: INTRODUCTION

> Our commitment to openness means more than simply informing the American people about how decisions are made. It means recognizing that government does not have all the answers, and that public officials need to draw on what citizens know. The way to solve the problems of our time, as one nation, is by involving the American people in shaping the policies that affect their lives.
>
> - Barack Obama

Public policy is supposed to resolve issues that have a significant impact on the public issues that will not be addressed by the private sector. These policies should seek to ensure that the public interest is being met (Dye, 1998). It is, however, difficult to address the needs of the public without meaningful input from citizens on major policy decisions (Ackerman, 2005; Held, 2006; Schively, Beekman, Carlson, & Reed, 2007). In a democratic society, citizen input into policy decisions is considered a right by many. Public participation seeks and facilitates the involvement of persons potentially affected by or interested in a decision and implies that the public's contribution will influence the decision (Abelson et al., 2002; Bickerstaff & Walker, 2001; Owens, 2000; Rowe & Frewer, 2004). The principle of public participation holds that those who are affected by a decision have the right to be involved in the decision-making process (Ackerman, 2005; Held, 2006). Government agencies exist to provide services that cannot or will not be met by the general market and serve the intent purpose of addressing the public interest (Sabatier, 1986). Public policy areas including education, health care, budget making, and transportation have significant impacts on the way individuals live their lives. However, the representative nature of decision-making in many facets of public administration limit direct input and influence of the general population in and on the decision making process (Abelson et

al., 2002; Rowe & Frewer, 2004; Stein & Sloane, 2003). This dissertation is a study of public involvement and focuses on the transportation planning decision-making process.

According to the 2009 National Household Travel Survey, while household size has declined in the U.S., all other major travel indicators increased between 1969 and 2009. Over the last four decades the typical American household acquired more vehicles, more drivers, and more workers (Federal Highway Administration [FHWA], 2011). Transportation policy has an impact on every aspect of our lives. Everything from basic facets of life, like food consumption to family vacations, would not be possible without the transportation infrastructure upon which society is so dependent. The market for transportation services is segmented in new ways that result from socioeconomic and demographic changes, mode choice, income, educational attainment, or purchasing power (Abelson et al., 2002; King, Feltey, & Susel, 1998; O'Connor, Schwatz, Schaad, & Boyd, 2000; Stein & Sloane, 2003). With a growing customer base, transportation decision makers, policy makers, and professionals must be sensitive to understanding and meeting the needs of existing users of the transportation system while recognizing that new users may have different but valid expectations (Stein & Sloane, 2003; Wilson, 1994). Because transportation policy effects society in many ways, it is important that public input be considered as a part of the decision making process. Transportation affects life on a daily basis more than many other policy areas – yet, transportation planning is often carried out without significant input from the public. The public should play a role in the decisions shaping what transportation systems and services will be a part of their communities (Federal Highway Administation, 2000; O'Connor et al., 2000; Scott, 2002).

"Public involvement is the process of two-way communication between citizens and government by which transportation agencies and other officials give notice and information to

the public and use public input as a factor in decision making" (O'Connor et al., 2000). The body of literature on this topic indicates that effective public participation lessens the likelihood of individuals, neighborhoods, and communities being overlooked or unfairly required to bear the burdens of infrastructure projects while reaping few of the benefits from these efforts (PBS&J, 2009; Stein & Sloane, 2003; Wilson, 1994). Consulting, engaging, involving, and listening to the public through the use of multiple tools and techniques is crucial to identifying public values, needs, and characteristics; to gathering information; and to building a consensus on transportation programs and projects (O'Connor et al., 2000; PBS&J, 2009; Stein & Sloane, 2003).

While there is general agreement about the importance of public participation in transportation decision making processes (Bickerstaff & Walker, 2001; Burby, 2003; Schively et al., 2007), there is little consistency in its application or affects (O'Connor et al., 2000; PBS&J, 2009; Stein & Sloane, 2003). The literature arguing the merits of effective participation in public decision making has evolved over the years, resulting in a decision model that assumes that public input into the assessment of transportation needs and solutions is a key factor in most transportation decisions (Federal Highway Administation, 2000; National Transit Institute, 2004; O'Connor et al., 2000; Stein & Sloane, 2003). This evolution has resulted in the use of various public participation techniques ranging from traditional methods such as public hearings, information meetings, and focus groups to the use of Internet based surveys and social networking websites to gather feedback from citizens on transportation options and considerations (National Transit Institute, 2004; PBS&J, 2009; Stein & Sloane, 2003). Public involvement can take place at a variety of levels, ranging from simple information gathering exercises that involve listening to the community's perspective, to more complex processes that

are built around two-way conversations, deliberation, and collaborative decision making (Gregory, Hartz-Karp, & Watson, 2008). Though many participation techniques are available to public officials, in a time of limited resources, it is important that the most effective techniques are employed.

One of the ways to evaluate the effectiveness of public participation is to consider the level of participation (Arnstein, 1969; Morse, 2006) that influences the manner in which the public provides input on policy issues. Additionally, the need for approaches that emphasize two-way interaction between decision makers and the public, as well as deliberation among participants in public involvement activities (Abelson et al., 2002; Morse, 2006; O'Connor et al., 2000; Rowe & Frewer, 2004), should be considered when discussing public input in policy decisions. These approaches, in contrast to more traditional approaches to engagement, are expected to yield a different type of output for informing the public decision making process (Abelson et al., 2002; Gregory et al., 2008). More complex decision making processes require and produce a more informed citizenry that has a clear understanding of the issue at hand (Abelson et al., 2002).

Purpose of Study

The purpose of this study is to examine public participation in transportation planning and how the level of engagement of public participation techniques and deliberation affect transportation planning decisions in metropolitan areas. This will be accomplished by exploring the characteristics of public participation in transportation planning at the regional level. By studying and analyzing the public participation practices that have been used to support the development of the Metropolitan Transportation Plan (MTP) in the metropolitan regions of

Virginia, this research helps to determine what characteristics are present in successful programs and how certain types of public participation affect transportation planning. Particularly, the level of engagement and deliberation will be explored. My review of the literature did not yield any studies that have examined level of engagement or deliberation in the transportation policy arena. This study seeks to fill a gap in the existing research.

Research Questions

In exploring this issue, this study addresses the following questions:

1. What are the characteristics of public participation conducted for transportation planning by Virginia's Metropolitan Planning Organizations?
2. Are Metropolitan Transportation Plans reflective of the public input received?
3. Is there a relationship between the characteristics of public participation and the degree to which Metropolitan Transportation Plans reflect public input?
4. Is there a relationship between the level of engagement of public participation and the degree to which Metropolitan Transportation Plans reflect public input?
5. Does deliberation result in Metropolitan Transportation Plans that are more reflective of public input?

Significance of Study

Transportation is an issue in which all citizens have a stake because the transportation system and the services it provides impacts every aspect of American life (Stein & Sloane, 2003). Additionally, most citizens have an opinion, usually based on their personal experiences, about what transportation needs should be met and how those needs should be funded. In a time

of limited resources, increasing public concern over the investment of tax dollars in the country's infrastructure and a greater demand for sustainable communities, it is more important than ever to gain public support for decisions made regarding transportation investments. The employment of effective public involvement strategies provide individuals, neighborhoods and communities with a greater opportunity to provide decision makers with information about local and individual transportation needs (Stein & Sloane, 2003; Wilson, 1994). Engaging the public as an ally can result in developing a deeper conversation and gaining more practical insights into diverse issues and concerns than if all parties acted alone and at odds with each other (PBS&J, 2009). By being a part of the discussion, those that may be directly impacted may support the decisions made because they understand how those decisions were reached (National Transit Institute, 2004). Inclusive and active public involvement simply makes for better transportation decisions that are based on consumers' needs.

The results of this study will provide decision makers with valuable information for more effective public participation to guide decisions on transportation planning, programming, project development and implementation.

This study of public participation methods in the area of transportation planning provides information for both theoretical and practical applications. From a theoretical standpoint, the levels of engagement and deliberative democracy theory are explored in addition to public participation program design and effectiveness. Of greater significance are the influences that the results of this study will have on practical applications in the area of public involvement for transportation planning organizations. Given that this study will be performed among Metropolitan Planning Organizations (MPOs) in the Commonwealth of Virginia, its results can

be used by federal, state, and regional agencies to improve public involvement programs and activities.

Statement of the Problem

In the planning, financing, designing and maintenance of transportation systems, decisions are made regarding the best approaches to addressing transportation needs. While common professional and technical practices are employed to determine transportation needs, often times decisions regarding the use of transportation resources (funds for roadway improvements, transit services, staffing, etc.) are made by politically connected figures on the state and local levels that are concerned with affluent and influential constituencies or creating opportunities for increased tax bases and economic development (Erickson, 2003; Morris, Wheeler, & Fragala, 2010; National Transit Institute, 2004). Though these decisions are technically justified and may be politically motivated approaches to analyzing and determining transportation needs, there are usually affected parties that go unheard in the decision making process (Morris et al., 2010; National Transit Institute, 2004).

Federal, state and local laws often require that the public be included in the transportation decision making process (DOT, 2007; Federal Highway Administation, 2000; National Transit Institute, 2004). However, public participation is a complex concept (Rowe & Frewer, 2004). There are several ways and levels by which the public may be involved in a policy decision making process (Arnstein, 1969; Pollak & Nelkin, 1979). Participation may range from the public being mere recipients of information from government agencies to being actively involved in the decision making process through participation in a citizen advisory

committee (Rowe & Frewer, 2004). Due to the fact that the laws requiring public involvement are intentionally vague and don't prescribe specific approaches, there is no consistency in public participation approaches and many state, regional, and local transportation agencies choose to do only what is necessary to meet minimum requirements (PBS&J, 2009). Despite federal mandates, it has been found that many State Departments of Transportation, MPOs, and other providers of transportation services view these requirements as an impediment to the process rather than an opportunity for process improvement (Morris et al., 2010; PBS&J, 2009).

In the application of federal public participation requirements, transportation agencies often mistake public participation for public relations or public information (PBS&J, 2009). "Public Relations" is the art or science of establishing and promoting a favorable relationship with the public. Public information is one-way communication of specific information by an agency to the public. Public participation is active two-way communication between an agency… and its publics (PBS&J, 2009).

Public hearings have traditionally been used to give the public the opportunity to speak to highway and transit agencies regarding projects and long range plans (Morris et al., 2010; PBS&J, 2009). Though public hearings are the most common form of citizen participation, they often fail to meet their objective (Baker, Addams, & Davis, 2005b). Studies indicate that in most cases, these events occurred so close to the actual point of decision-making that they often do not allow for an appropriate incorporation of public comments and concerns (Baker et al., 2005b). No genuine conversation takes place with attendees to actually solicit feedback regarding public concerns, and usually, the written comments collected are filed for record keeping purposes (Baker, Addams, & Davis, 2005a; Morris et al., 2010; National Transit Institute, 2004; PBS&J, 2009; Schively et al., 2007). Additionally, attendance at these meetings is generally not

representative of the affected population, but more often includes a group of individuals that attend public meetings on a regular basis for the purposes of advancing special interests (Dilley & Gallagher, 1999; Kim, Koza, & Goulias, 2001; National Transit Institute, 2004). This practice has resulted in public resistance to the process, lengthy and expensive re-evaluations and changes to designs, skepticism about whether the public could truly influence the outcome of a transportation project, loss of trust in government agencies, and expensive and time consuming law suits (Erickson, 2003; PBS&J, 2009). Other methods employed include the distribution of information or the availability of information on transportation plans and projects via the mail, newspaper, or Internet websites (Federal Highway Administation, 2000; Morris et al., 2010; National Transit Institute, 2004; PBS&J, 2009; Schively et al., 2007). These practices can be problematic for constituents who have difficulty with reading and writing as well as non-English speaking populations (Dilley & Gallagher, 1999; Kim et al., 2001; Morris et al., 2010; National Transit Institute, 2004; PBS&J, 2009).

While there is general agreement about the importance of public participation in the transportation decision-making process (Bickerstaff & Walker, 2001; Burby, 2003), due to varying budgets and limited resources of transportation agencies around the country, there is little consistency in the employment of participation methods (Morris et al., 2010; O'Connor et al., 2000; Schively et al., 2007). Research of the past two decades has resulted in consensus among transportation professionals about the fundamentals of good practice (O'Connor et al., 2000), however, very little research has been done that evaluates and compares the effectiveness of specific methods of public participation in this field. Most of the empirical studies on public participation have been focused on identifying existing practices and tools that have demonstrated some success in increasing the number of persons that participate in transportation

related public participation activities (Dilley & Gallagher, 1999; Morris et al., 2010; National Transit Institute, 2004; PBS&J, 2009; Schively et al., 2007). These "best practices" have been proven to improve upon the number of participants from the general public in traditionally used participation methods and they have provided a wider array of options for public administrators to use for purposes of public involvement (Morris et al., 2010; PBS&J, 2009; Schively et al., 2007). However, much of the current emphasis on participation methods should be focused on a prevailing view that methods used in the past are no longer appropriate for current decision making processes for a more informed and less deferential public (Inglehart, 1995; O'Hara, 1998).

Organization of Study

This dissertation is divided into five chapters. Chapter One provides an introduction to the study, the purpose and significance of the study, and statement of the problem.

Chapter Two provides the theoretical framework for this study. Chapter two summarizes a review of literature that focuses on the historical and contemporary context of public engagement and public participation in policy decision making arena. Beginning with an analysis of public laws, this section explores the impact of the social and political factors that cultivated the role of public opinion and public engagement on the public policy decision making process. Integrated theory, variables, and hypotheses are presented in this chapter.

Chapter Three frames the manner in which the study will be completed. This chapter discusses the research design, data collection and analysis procedures, and limitations of the methodology used.

Chapter Four presents the findings of the research.

Chapter Five summarizes the findings reported in Chapter Four and places them in the context of their policy implications and future recommendations. The limitations of the study will also be reported.

CHAPTER 2: LITERATURE REVIEW

Public Involvement in Transportation

Public participation in democratic society is not a new phenomenon. The concept and practice of community engagement can be traced back to the earliest forms of Greek democracy (Held, 2006). The concept of "participation" has been addressed by many authors with the movements of pluralism, direct democracy, and community engagement (Laird, 1993; Morse, 2006; Polsby, 1960; Rowe & Frewer, 2004). There have been surges in interest in community engagement during several decades during the past century. The 1960s and 1970s represent a key period of interest in participation in the United States.

The concept of participation rose in part due to declining public confidence in the processes that develop policy decisions (Dryzek, 1997; Rowe & Frewer, 2000). In the 1960s, several areas of thought arose regarding citizen participation in democratic government. Dahl was a leading contributor to the concept of pluralism, which is the belief that while politics and decision making is located mostly in the governmental framework, many non-governmental groups use combined resources to exert influence (Dahl, 1989; Dye, 1998). These organizations, which include among others unions, trade and professional associations, environmentalists, civil rights activists, business and financial lobbies, and formal and informal coalitions of like-minded citizens, influence the making and administration of laws and policy. Since the participants in this process constitute only a tiny fraction of the populace, the public acts mainly as bystanders (Connolly, 1995). Some pluralists believe that direct democracy is not only unworkable; it is not even necessarily desirable. Besides the logistical problems of having every citizen meet at one time to decide policies, political issues require continuous and expert attention, which the

average citizen does not have. Dahl claims that most people concentrate their time and energies on activities involving work, family, health, friendship, recreation, and the like (Held, 2006; Polsby, 1960). However, critics of pluralism claim that the top layers of society have a distinct advantage. Political scientist E. E. Schattschneider (1960) put the matter simply: "The flaw in the pluralist heaven is that the heavenly chorus sings with a strong upper-class accent" (p. 35). Politically valuable resources, in other words, tend to be concentrated among the rich and already powerful members of society and those at the bottom have much less to work with (Schattschneider, 1960). If success in the political arena depends on mobilizing resources, some groups will always have an unequal advantage (Held, 2006; Polsby, 1960).

Arnstein, writing in 1969 about citizen involvement in planning processes in the United States, described a ladder of participation. This ladder described approaches to public participation ranging from levels of non-participation such as “manipulation” and “therapy” to degrees of citizen power, culminating at “citizen control” (Arnstein, 1969). Arnstein broadly categorized these levels of participation as Nonparticipation, Tokenism, and Citizen Power. She defines citizen participation as the redistribution of power that enables the “have not” citizens, presently excluded from the political and economic processes, to be deliberately included in the future (Abelson et al., 2002; Arnstein, 1969; Morse, 2006). This model will be discussed in more detail later in this chapter.

While the focus on citizen participation dwindled in the 1980s (Abelson et al., 2002; Bradford, 2002; Morse, 2006), reduced trust in government and elected officials, greater access to information, and a more informed citizenry has led to a renewed interest in community involvement policies in the 1990s (Bradford, 2002; Morse, 2006) and the present.

The time frame during which interest in greater participation from the public in general policy areas peaked parallels similar requirements for participation in transportation policy. Beginning with legislation in the 1950s, Congress added the requirement for citizen participation to legislation that extended federal programs (PBS&J, 2009).

From the 1920s to the 1960s, public participation wasn't given much consideration in transportation planning efforts. The "systems approach" of estimating travel demand developing transportation systems to adequately meet that demand was the primary method used (Barnes & Langworthy, 2004). Increased automobile use was considered positive for societal growth and the social and environmental impacts of transportation infrastructure were not given much consideration (Barnes & Langworthy, 2004). Based on the Chicago Area Transportation Study of 1955 (CATS), "transportation networks were evaluated on the basis of economic efficiency, defined as the maximum amount of travel carried at the least costs" (Barnes & Langworthy, 2004; Weiner, 1999).

As the 1960s progressed, the construction of the federal interstate system began to negatively impact neighborhoods, leading to an increased awareness in environmental protection and concern for minority populations (Weiner, 1999). The Federal-Aid Highway Act (FHWA) of 1968 incorporated several provisions that were designed to protect the environment and reduce the negative effects of highway construction (Barnes & Langworthy, 2004).

Since the Federal-Aid Highway Act of 1950 and the federal transit laws originally enacted in 1964, efforts have been made to ensure that all interested persons and parties have multiple opportunities for their voices to be heard in how their transportation system is planned, designed, funded, developed, and operated (Erickson, 2003; Federal Highway Administation, 2000; National Transit Institute, 2004). The National Environmental Policy Act of 1969 (NEPA)

began influencing transportation planning directly (Dilley & Gallagher, 1999; PBS&J, 2009). Focusing on concerns about the impacts of large public projects on society, NEPA required that Environmental Impact Statements (EISs) be prepared for large, federally funded projects with potential environmental impacts (Barnes & Langworthy, 2004; Federal Highway Administation, 2000; National Transit Institute, 2004). Under EIS guidelines, transportation authorities must seek comments from local jurisdictions on the EIS documentation, and must make these documents available for public review and comment. Public hearings were also a requirement of the EIS process (Barnes & Langworthy, 2004; Federal Highway Administation, 2000; Weiner, 1999).

In 1976, the FHWA published its two-volume guidebook, *Effective Citizen Participation in Transportation Planning*. Historically, public involvement in state transportation policy making evolved as a result of federal transportation authorization legislation enacted by Congress (Dilley & Gallagher, 1999; Erickson, 2003; National Transit Institute, 2004). The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) raised public involvement to a new level in transportation planning and programming. In addition to citizens, this law identified affected public agencies, representatives of public transportation employees, private providers of transportation, and others as interested parties in the transportation planning process (PBS&J, 2009). ISTEA also required that State Departments of Transportation work with constituents on all projects that receive federal funding (Wilson, 1994). Federal regulations to implement ISTEA called for proactive public involvement processes. Subsequent federal transportation legislation advanced the requirements of public participation in the transportation planning process (Wilson, 1994). The Transportation Equity Act for the 21st Century (TEA-21) was enacted June 9, 1998 under the Clinton Administration and built upon the public

involvement requirements included in ISTEA. Under this legislation, freight shippers and representatives of freight transportation services were added as interested parties in the planning process (PBS&J, 2009). Also, Metropolitan Planning Organizations (MPOs), which have responsibility for transportation planning in cities (and their surrounding area) with populations over 50,000, were required, as a condition of funding, to develop public involvement procedures that outlined how citizens would be included in the transportation decision making process (Federal Highway Administation, 2000). TEA-21 required that agencies have "…*a proactive public involvement process that provides complete information, timely public notice, full public access to key decisions, and supports early and continuing involvement of the public in developing plans and Transportation Improvement Programs . . .*".(Federal Highway Administation, 2000, 2002; National Transit Institute, 2004) TEA-21 also required that these procedures included a process for assessing the effectiveness of the public involvement process over time. In 2005, George W. Bush signed the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) into law. This transportation legislation further extended the role of public involvement in the transportation planning process. SAFETEA-LU added representatives of users of pedestrian walkways and bicycle transportation facilities as interested parties and continued to broaden the scope of public participation in transportation decision making. The federal regulations under SAFETEA-LU require that a public participation plan be developed in consultation with these "interested parties" as a part of the transportation planning process (DOT, 2007). Additionally, SAFETEA-LU included requirements that visualization tools be used to enhance public involvement in various planning activities as well as the use of the World Wide Web for the dissemination of information in the transportation planning process (DOT, 2007).

In 2009, the Obama Administration's Open Government initiative represented a shift in the way Federal agencies conduct business and engage the public. In its first Open Government Plan adopted in 2009, the United States Department of Transportation (USDOT) focused on effecting a policy and internal cultural change that is more transparent, participatory, and collaborative in nature (US DOT, 2012). Version 2.0 of the USDOT's Open Government Plan adopted in 2012 highlights a public engagement model that focuses on sharing information and data, gathering insights, knowledge, expertise and experiences, inviting input on USDOT issues, policies, and programs, and building opportunities for collaboration and coordination (US DOT, 2012). Core values highlighted in the plan include communication, accountability, accessibility, and diversity (US DOT, 2012). On July, 6 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) was enacted. This highway authorization represented a major departure from the "TEA" series of highway authorizations established in 1991 and transforms the policy and programmatic framework of the country's highway program to a streamlined, performance based, multimodal approach to system management. No major changes were included in the law related to public participation, but the law's focus on performance measurement may affect the approach by which public input is gathered and considered in transportation decisions. The effects of the "open government" model, the digital age and the more common use of social networks by transportation agencies remain to be seen.

The Federal-Aid Highway Act of 1962 was the first federal legislation to mandate transportation planning as a condition for receiving federal funds in urbanized areas (Barnes & Langworthy, 2004; Weiner, 1999). The "3C" process was established under this act, requiring that transportation planning be a "continuing, comprehensive, and cooperative" process (DOT, 2007; Weiner, 1999). Even though one of the original ten basic elements of the 3C process was

"Social and community-value factors" (i.e. preservation of open space, parks, and recreational facilities; preservation of historical sites and buildings; environmental amenities; and aesthetics), the overall planning approach remained technically based, refining and using methods established with the CATS study previously mentioned (Barnes & Langworthy, 2004).

Today, metropolitan transportation planning continues to be the process of examining travel and transportation issues and needs in metropolitan areas. It is carried out by Metropolitan Planning Organizations (MPOs) in cooperation with State Departments of Transportation and providers of regional and local transit (DOT, 2007). It includes a demographic analysis of the community in question, as well as an examination of travel patterns and trends. The planning process includes an analysis of alternatives to meet projected future demands, and for providing a transportation system that addresses mobility in a metropolitan region (Federal Highway Administation, 2002). Transportation planning includes a number of steps, such as (a) monitoring existing conditions; (b) forecasting future population and employment growth, including assessing projected land uses in the region and identifying major growth corridors; (c) identifying current and projected future transportation problems and needs and analyzing, through detailed planning studies, various transportation improvement strategies to address those needs; (d) developing long-range plans and short-range programs of alternative capital improvement and operational strategies for moving people and goods; (e) estimating the impact of recommended future improvements to the transportation system on environmental features, including air quality; and (f) developing a financial plan for securing sufficient revenues to cover the costs of implementing strategies (Federal Highway Administation, 2002). As depicted in Figure 1, transportation planning is a continuous process and there are several critical factors that

inform the process. Public involvement has been considered a critical input into the planning process.

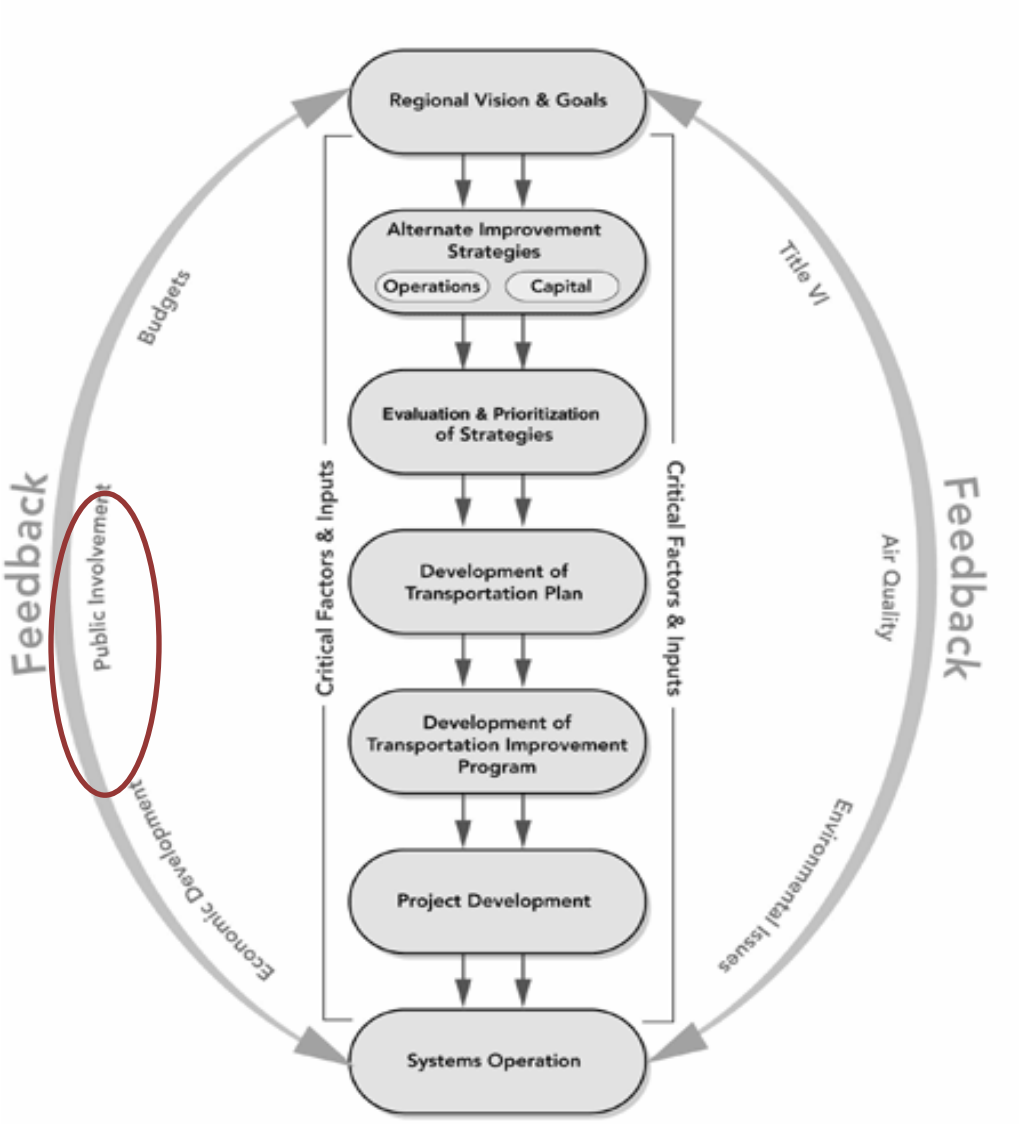


***Figure 1*: The Transportation Planning Process (Federal Highway Administration's Guide to Transportation Decision Making, 2000)**

The development and evolution of federal transportation policy and requirements has increased the frequency of public involvement activities in the transportation sector. Public participation is an inherent part of the planning and project development process. However, it has been widely shown that most transportation providers only comply minimally with laws

requiring public participation (Baker et al., 2005b), and the effectiveness of the methods employed is unproven (O'Connor et al., 2000; PBS&J, 2009; Schively et al., 2007; Stein & Sloane, 2003).

Public Participation Design and Effectiveness

Literature on organizational governance indicates that in order to determine how governance impacts organizational outcomes both, inputs and process matter (Hillman & Dalziel, 2003; Kochan et al., 2003; McGinnis, 2012). Specifically, public sector scholars find that the relationship between community involvement and organizational decisions is often intermediated by the design or the process of how community members are engaged in a public participation program (Ebdon & Franklin, 2006; McGinnis, 2012). Public participation literature goes beyond the simple assumption that involving the public will impact organizational outcomes (Ebdon & Franklin, 2006; Franklin & Ebdon, 2005; Irvin & Stansbury, 2004; Ostrander, 1999; Rosener, 1978).

Public participation scholars find that the impact of community involvement on organizational decisions will not automatically yield different organizational decisions unless the public involvement program is designed effectively (Ebdon & Franklin, 2006). For example, Franklin and Ebdon (2005) examine community input in budgeting decisions and find that community input doesn‘t always lead to a difference in allocation decisions. They find that when community input is used without particular design elements it can lead to merely informing citizens about the budget process rather than gathering input that might change allocation decisions (Franklin & Ebdon, 2005; McGinnis, 2012).

The effectiveness of public participation programs has been defined and studied in a number of different ways. From an evaluative perspective, Roesner (1978) defines effectiveness as achievement of public participation programs goals and states that that scholars first have to determine if the public participation program itself is a goal or if public participation is seen as a means to another goal. If the public participation program itself is the goal, it is easy to measure whether or not the program was effective since researchers can measure the number of individuals who participate, how long they participated, etc. (McGinnis, 2012; Rosener, 1978).

However, if the public participation program is a means to an end, understanding its effectiveness becomes more difficult. There are several reasons for this difficulty. First, very few public participation programs clearly state their goals or objectives up front (Ebdon & Franklin, 2006; Irvin & Stansbury, 2004; Rosener, 1978). Even if goals are established for public participation programs at their onset, it is difficult to define and collect data on abstract goals such as enhanced information use or improved decision making (McGinnis, 2012). The absence of research evaluating the outcomes of public participation programs is confirmed by Ebdon and Franklin (2006) who conduct a literature review on this topic and reveal the lack of knowledge on goals and outcomes of public participation. While there are several opinions on how program effectiveness can be measured, there is a belief that *good* public participation processes result in good public policy outcomes (Rowe & Frewer, 2004). "It would seem more likely that decision makers will ignore the recommendations of a (public participation) exercise if they perceive it to have been poorly run, than if they perceive it to have been well run" (Rowe & Frewer, 2004).

Within public participation literature, a subset of research focuses on the components of an effectively designed public participation program. This research finds that effectively

designed public participation programs impact organizational outcomes, particularly in the manner by which decisions are made. Research that focuses on the design of public participation programs is important because there are many examples of public participation programs that largely consist of poor planning or execution (King et al., 1998).

A series of federal statutes and regulations list the requirements for how public involvement should be conducted by states and metropolitan and rural planning organizations. While there is no comprehensive synthesis of national public involvement practices for transportation programs, a number of published studies consistently describe factors contributing to effective approaches for engaging the public in the decision making process (Morris et al., 2010). The Federal Highway Administration and the Federal Transit Administration provide the following guidelines for designing a public involvement program in their 2002 publication *Public Involvement Techniques for Transportation Decision-Making*:

- Act in accord with basic democratic principles by providing opportunities to debate issues, frame alternative solutions and affect final decisions. Agencies accomplish this by sharing the details about their plans, attempting to reflect the goals of the community, and engaging the entire community.
- Begin public involvement as early as possible and conduct it continuously throughout the decision making process.
- Use a variety of techniques to engage the public tailored to the unique needs of the various groups in the project area, particularly those who have traditionally been underserved or disenfranchised.

- Take the initiative to seek out and actively engage them in creative ways where they are located.

Federal transportation planning guidance also provides five steps to "systematically setting up and implementing a public involvement program for a specific plan, program, or project"(Federal Highway Administation 2002, pp iii-iv): set goals and objectives for the public involvement program; identify the people to be reached; develop a general approach or set of general strategies; flesh out the approach with specific techniques; and assure that proposed strategies and techniques aid decision-making to close the loop.

In the National Transit Institute's course on "Public Involvement in Transportation Decision Making", it is noted that public involvement programs are expected to be proactive, early and continuing, educational, timely, broad-based, and responsive (National Transit Institute, 2004). In an effort to improve upon the effectiveness of its public involvement efforts, the Florida Department of Transportation conducted a study in 2008 of performance measures to evaluate public involvement. They found that there are four key objectives that provide the basis for performance measurement in public involvement. These objectives include equity (provide equitable access to transportation decision-making), information (inform the public early, clearly, and continuously), methods (use a variety of methods to involve and engage the public), and responsiveness (carefully consider public input in transportation decisions) (Kramer, Williams, Hopes, & Bond, 2008).

In addition to the federal guidance on public participation, the literature indicates that organizational and community factors also influence the effectiveness of public involvement efforts (Morris et al., 2010; Rosener, 1978). Organizational culture, the staff conducting public

involvement, and the methods used to engage people can affect the effectiveness of public involvement (Kramer et al., 2008; Rowe & Frewer, 2000).

There are several theories that highlight the importance and relevance of public participation in public policy decision-making. Theorists have suggested that there is a relationship between methods and types of public engagement activities and public policy decisions (Arnstein, 1969; Connor, 1986; Dorcey & Economy, 1994; Wiedemann & Femers, 1993). This research will be structured within the framework of the theories of levels of engagement and deliberative democracy.

Levels of Engagement

Citizen participation remains an elusive and, "fundamentally contested concept in the literature" (Innes & Booher, 2004; Rowe & Frewer, 2000). In debates about inclusive forms of government terms such as 'community engagement', 'citizen participation', 'civic engagement', 'collaborative participation', 'public involvement' and 'public participation' tend to be used interchangeably. While all of these terms and approaches share a common commitment to citizen involvement in public decision making, a clearer understanding of the theoretical and practical implications is needed. There is no consensus about the meaning of these terms (Morse, 2006; Rowe & Frewer, 2000).

There are different ways to categorize government-community interactions. Shirley Arnstein's "Ladder of Participation" provides a classic example.

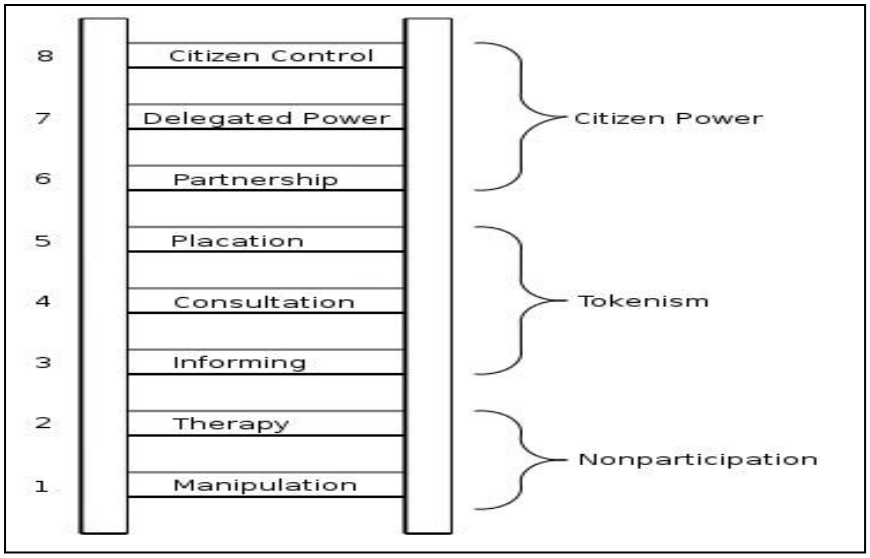


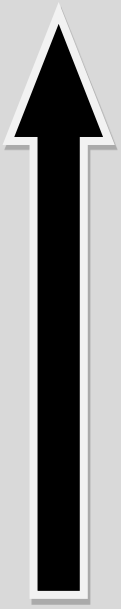
***Figure 2*: Arnstein's Ladder of Participation (Arnstein, 1969)**

The levels of citizen participation are arranged in accordance with their degree of empowerment, moving from non-participation, to degrees of tokenism, to degrees of citizen power. Arnstein considered that true participation involves a high level of empowerment of the public and a direct input into the decision making process (Rowe & Frewer, 2004). For Arnstein (1969), citizen control is the epitome of involvement, when "participants or residents can govern a program or an institution, be in full charge of policy and managerial aspects, and be able to negotiate the conditions under which 'outsiders' may change them" (p. 223). Approaches that appear to be participative yet yield no real power are not considered effective according to the Arnstein model. While methods such as public hearings are not considered to be truly participative, surveys are closer to true participation due to the provision of feedback, though they lack empowerment (Rowe & Frewer, 2000).

The concept of levels of engagement has been explored and has evolved (Connor, 1986; Dorcey & Economy, 1994; Wiedemann & Femers, 1993). While Sherry Arnstein views ideal public participation as full citizen control, other less constrained views of the concept of

participation draw distinctions between "communication", in which the public has no input and is only the recipient of information, and "participation", in which public input is allowed (Innes & Booher, 2004) in decision making processes. Other ladders or scales have been developed based on subsequent work completed on levels of engagement (Connor, 1986; Dorcey & Economy, 1994; Wiedemann & Femers, 1993). A comparison of these can be found in Table 1.

Table 1: Level of Engagement Scales

Increasing Level of Engagement	Arnstein (1969)	Conner (1988)	Weidmann and Femer (1993)	Dorcey (1994)
Higher  **Lower**	Degrees of Citizen Power • Citizen Control • Delegated power • Partnership Degrees of Tokenism • Placation • Consultation • Informing Non-participation • Therapy • Manipulation	Leaders • Resolution/ prevention • Litigation • Mediation • Joint planning General Public • Consultation • Information feedback • Education	• Public Participation in Final Decision • Public participation in assessing risks and recommending solutions • Public participation in defining interests and actors and determining agenda • Public right to object • Informing the public • Public right to know	• Ongoing involvement • Seek consensus • Task ideas, seek advice • Consult on reactions • Define issues • Gather information, perspectives • Educate • Inform

Source: (Arnstein, 1969; Conner, 1988; Weidemann & Femers, 1993; Dorcey, 1994)

The International Association for Public Participation (IAP2) is an international association established in 1990 and is comprised of members who seek to promote and improve

the practice of public participation in relation to individuals, governments, institutions and other entities that affect the public interest in nations throughout the world (IAP2, 2007). Similar to other scales of participation described previously, the IAP2's Spectrum of Public Participation is based on five levels of public impact (Inform, Consult, Involve, Collaborate, and Empower) and was designed to assist practitioners with the selection of the level of participation that defines the public's role in any public participation process. The spectrum shows that differing levels of participation are legitimate and depend on the goals, time frames, resources, and levels of concern in the decision to be made (IAP2, 2007).

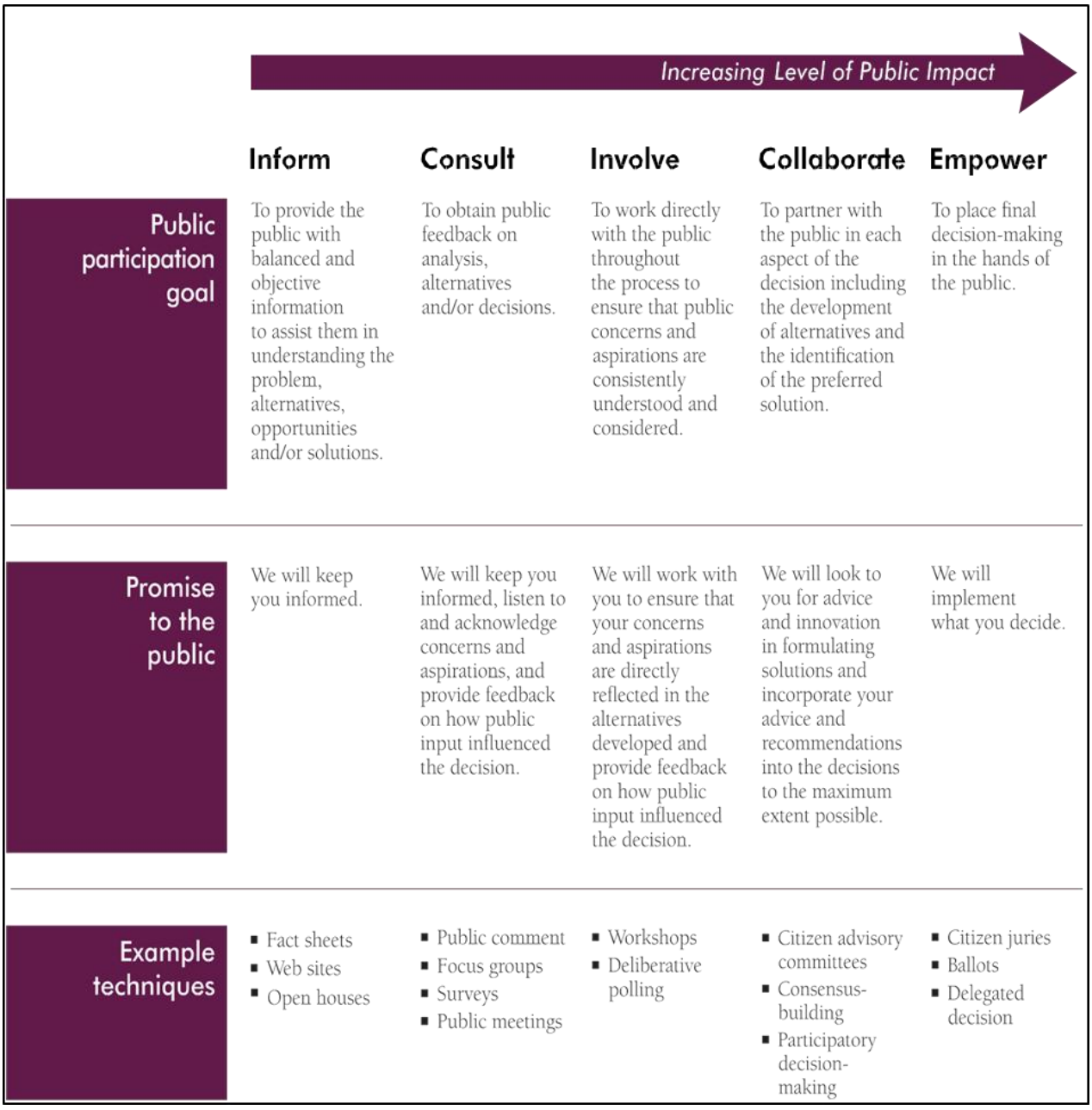


Figure 3: IAP2 Spectrum of Participation (2007)

The IAP2 Spectrum is a matrix chart that, for each level of public impact, provides a description of the public participation goal (i.e., what the practitioner hopes to accomplish through participation), a promise to the public (i.e., what the public can expect from the practitioner as an outcome of the participation), and examples of techniques that can be used at each level of participation. This spectrum is a tool that is currently used on an international level by public participation practitioners in a wide range of disciplines (IAP2, 2007; North Carolina Department of Transportation, 2009).

The continuum of engagement developed by Health Canada provides a useful tool for defining engagement levels; their five-level continuum describes a spectrum from low level to high level public involvement, and provides examples of when each level might be useful (Health Canada, 2003). The five levels defined by Health Canada are: (a) Inform/Educate, (b) Gather Information, (c) Discuss, (d) Engage, and (e) Partner. More traditional approaches to engagement – such as solicitations for individual or group comments, invitations for community submissions, surveys to gather information, public meetings, or inviting individual consumers to work on committees as consumer representatives – are clustered around the middle levels of the Health Canada continuum (Gregory et al., 2008; Health Canada, 2003). Deliberative approaches to community engagement, those approaches that include discussion and consideration of multiple sides of an issue, typically provide a high level of public involvement and would be positioned at Level 4 (Engage) or Level 5 (Partner) of the Health Canada continuum.

There are many mechanisms available that cover the broad spectrum of levels of participation. However, there are other factors that influence the impact that participation has on the decision making process including public willingness and trust of participation process. The question of the public's willingness to participate has become central to the debate and divides

critics and advocates. Stivers (1990) argues that 'Direct citizen participation is based on a false notion. "Human nature is flawed".' People are either 'too passionate and selfish or too passive and apathetic' to be directly involved. Studies have 'demonstrated that the common man is not the rational, self-motivating, and thoughtful democrat of the Jefferson ideal (Gastil, 2000). Rather the picture that emerges is of a lethargic, irrational, and prejudiced individual who neither understands nor is particularly committed to democratic principles (Hart, 1972; Roberts, 2004). Since individual citizens cannot realistically be trusted, they need 'benevolent, but firm, guidance from an informed and politically active minority' (Hart, 1972; Roberts, 2004).

Many critics regard direct citizen participation with distrust (Dahl, 1989). They doubt the ability of the masses to make a positive contribution to governance; in fact, they are viewed as a potential threat to the system. The masses, says Schumpeter (1943), are 'incapable of action other than a stampede' (p. 283). Such views are consistent with a viewpoint that substantive involvement by citizens in governance is 'unworkable, however desirable it may be' (Stivers, 1990). An opposing viewpoint contends that 'the perceptions of the ordinary people are more to be trusted than the pretensions of national leaders and of the bureaucracies who serve them' (Strange, 1996).

The appropriate level of participation is often chosen based on many factors, such as the scope of the project, the characteristics of the public or stakeholders, and the cooperation from organizations or government agencies. One common misconception is that "the higher on the ladder, the better." Kyem (1998) shows that some higher rungs on the ladder are not supported within the existing context of public policy. Without a corresponding amount of support, higher on the "ladder" may mean a "worse" result (Hoyt, Khosla, & Canepa, 2005). The internet and other techniques, to some extent, change the ladder of participation. Kingston (2002) developed

an e-participation ladder. Along his ladder, from bottom to top, two-way communication becomes more and more interactive through the exchange of data and comments (Zhong, 2007).

While it can be argued that the level of participation may not be linked to the quality of the decision or the success of participation activities (Hoyt et al., 2005; Kyem, 1998), I posit that there is a link between the level of participation and the degree to which participation activities affect policy decisions.

Deliberative Democracy

"Deliberation refers either to a particular sort of discussion – one that involves the careful and serious weighing of reasons for and against some proposition – or to an interior process by which and individual weighs reasons for and against a course of action" (Abelson et al., 2002; Fearon, 1998). Deliberative democracy is a system of political decision-making that relies on consultation to make policy and relies on direct public participation in the decision making process (De Marchi & Ravetz, 2001). Deliberative democracy is based on the premise that policy should be derived from public deliberation. There are several key principles of the theory of deliberative democracy. They include: (a) an ongoing independent association with expected continuation; (b) the citizens in the democracy structure their institutions such that deliberation is the deciding factor in the creation of the institutions and the institutions allow deliberation to continue; (c) a commitment to the respect of a pluralism of values and aims within the policy; (d) citizens consider deliberative procedures as the legitimate source of law and policy development and desire the ability to validate that laws are transparent and easily traceable to the deliberative process; and (e) each member recognizes and respects other members' deliberative capacity (Carson & Hartz-Karp, 2005; Cohen, 1989; Parkinson, 2003).

One of the hopes of deliberation advocates is that with good deliberation, sheer advantage of power will not overwhelm the ability of people to communicate their perspectives effectively (Mendelberg, 2002). One value of deliberative techniques is that participants are exposed to a range of perspectives (Carson, 2006; Carson & Hartz-Karp, 2005). Research shows that people involved in deliberation often change their attitudes as they listen and have time to reflect (Carpini, Cook, & Jacobs, 2004). Participants in deliberative public participation techniques such as deliberative workshops may be given information in advance, and may return to the discussion on numerous occasions. This means that participants can come to grips with complex issues and various arguments about issues in a way that is not typically possible through traditional consultation (Carpini et al., 2004).

The possibility of engaging in meaningful deliberation is significantly enhanced if participation is diverse, inclusive, and descriptively representative. Engaging with a cross-section of the community, including people who are unaligned to specific interest groups, increases the likelihood of achieving a deliberative space, particularly when compared to engaging with the articulate, the vocal, and those with vested interests (Carpini et al., 2004; Carson, 2006). Research shows that people may change their views of effective policies as a result of deliberation (Fishkin, 1991). "On policy issues that are not too salient – the great majority of policy issues – deliberation frequently changes attitudes and makes preferences more single-peaked" (Farrar et al., 2010). Deliberation can best be accomplished in Habermas' idea of the "public sphere", a place where public-minded or common interest discussion (Baiocchi, 2003) can take place.

Using dialog and deliberation is one useful and practical way to engage citizens in decision making. The aim is to facilitate the discussion to help participants to resolve

disagreements and differences in a non-adversarial manner, and steer them toward win-win outcomes (Spano, 2001). Facilitation is also important to ensure that power differences are held in check. Deliberative public involvement methods are credited with their legitimizing effects for the agency, increasing sustainability of the decision, improving policy relevance, contributing to citizen empowerment and capacity building, and resolving difficult conflicts (Cooke & Kothari, 2001; Kelly, 2004; Pellizzoni, 2003).

This study seeks to explore the characteristics of public participation techniques used in transportation planning and programming at the regional level. The purpose of this study is to examine public participation in transportation planning and determine if transportation decisions are reflective of public input. It will also examine how the level of engagement of public participation techniques and deliberation affect transportation planning decisions in metropolitan areas in Virginia.

Integrated Theory and Hypotheses

Existing literature on public participation finds that the relationship between community involvement and organizational decisions is often intermediated by the design or the process of how community members are engaged in a public participation program (Ebdon & Franklin, 2006). It has also been found that the types of techniques that are employed may affect policy decisions in different ways (Ebdon & Franklin, 2006). I posit that different characteristics of public participation programs affect the outcomes of the process (Ebdon & Franklin, 2006; Rowe & Frewer, 2004).

I also argue that there is a relationship between the level of engagement and the degree to which public input affects the decisions made in the transportation planning process (Connor,

1986; Dorcey & Economy, 1994; Rowe & Frewer, 2004; Wiedemann & Femers, 1993). Lastly, I suggest that when public participation activities include deliberation, resulting decisions are more reflective of the input received (Cooke & Kothari, 2001; Kelly, 2004; Pellizzoni, 2003). Based on the review of the literature, the following hypotheses will be tested:

Hypothesis 1: The degree to which Metropolitan Transportation Plans reflect public input is dependent upon the characteristics of the public participation program.

It is suggested that in order to determine how governance impacts organizational outcomes, the process by which governance takes place matters (Hillman & Dalziel, 2003). Specifically, the relationship between community involvement and organizational decisions is mediated by the design or the process of how the public is engaged through public participation programs (Ebdon & Franklin, 2006; Kramer et al., 2008; National Transit Institute, 2004). Consideration should be given to the process by which public participation is conducted in the metropolitan regions and factors that characterize the participation approach. I hypothesize the following regarding characteristics of public participation:

Hypothesis 1.1: Metropolitan Transportation Plans are more reflective of public input when the Public Participation Plan is well defined.

Hypothesis 1.2: Metropolitan Transportation Plans are more reflective of public input when more funding is provided for public participation activities.

Hypothesis 1.3: Metropolitan Transportation Plans are more reflective of public input when public participation activities are conducted early and continuously throughout the planning process.

Hypothesis 1.4: Metropolitan Transportation Plans are more reflective of public input when complete information is provided to the public.

Hypothesis 1.5: Metropolitan Transportation Plans are more reflective of public input when public participation activities have broad outreach.

Hypothesis 1.6: Metropolitan Transportation Plans are more reflective of public input when planning staff is responsive to feedback collected during public participation activities.

Arnstein's ladder of participation considered "true participation" as the empowerment of the public and direct input from the public on the decision (Arnstein, 1969). The literature indicates that when citizens experience a higher level of participation in public policy decisions, policy outcomes are usually reflective of the input provided (Connor, 1986; Dorcey & Economy, 1994; Rowe & Frewer, 2004; Wiedemann & Femers, 1993). I hypothesize:

Hypothesis 2: Metropolitan Transportation Plans are more reflective of public input when there is a higher level of engagement.

Deliberative approaches to public involvement are generally found to provide a high level of public engagement in policy decisions (Connor, 1986). This method also facilitates the provision of a higher level of information on policy issues when compared to other types of techniques. This provision of information and the action of deliberation contributes to consensus building (Spano, 2001). I hypothesize the following:

Hypothesis 3: Metropolitan Transportation Plans are more reflective of public input when public participation includes deliberation.

These hypotheses were tested by examining the process by which the Metropolitan Planning Organizations in Virginia have developed the current Metropolitan Transportation Plan (MTP). The Metropolitan Transportation Plan is the official multimodal transportation plan addressing at least a 20-year planning horizon that is developed, adopted, and updated by the MPO through the metropolitan transportation planning process (DOT, 2007). My hypotheses are summarized in Tables 2 and 3.

Table 2: Hypotheses 1 – 3: Factors that Affect Transportation Decisions

	Characteristics	**Level of Engagement**	**Deliberation**
Hypothesis	**1**	**2**	**3**
	1.1 Well Defined Participation Plan 1.2 Level of Funding 1.3 Early and Continuous Participation 1.4 Complete Information Provided 1.5 Broad Outreach 1.6 Responsiveness	 Empower Collaborate Involve Consult Inform	Information was provided to citizens Opportunity was provided to review, discuss and debate issues and options Opportunity provided to reach decision Feedback or recommendation was provided to decision makers

Table 3: Sub-Hypotheses 1.1 – 1.6: Characteristics that Affect Public Participation Effectiveness

Characteristics of Public Participation Programs		
1.1	Well Defined Participation Plan	Includes Goals, Objectives, and Performance Measures
1.2	Funding Level	Higher % of Budget
1.3	Early and Continuous Participation	At Project Initiation and Key Decision Points Throughout
1.4	Complete Information Provided	Level of Information Asymmetry; Visual and Verbal explanation of technical information
1.5	Broad Outreach	Various Techniques; Low Income and Minorities; Geographical Diversity; Multiple Languages
1.6	Responsiveness	Comments are recorded and responded to; customer satisfaction is measured.

Definition of Variables

The hypotheses include several independent variables (tables 2 and 3) and one common dependent variable. The common dependent variable across all hypotheses is the extent to which the Metropolitan Transportation Plan reflects public input.

Independent Variables

There are three primary independent variables. Those variables are the characteristics of the public participation program for the MPO, the level of engagement of public participation techniques used by the MPO in the transportation planning process, and the presence of deliberation as a part of the public participation activities used in the transportation planning process. These are attribute variables that act as predictors, antecedents, or presumed influences on the dependent variable in this study (Gliner & Morgan, 2000).

The first variable, the characteristics of public participation, include six distinct characteristics of a public participation process. Based on the literature (Kramer et al., 2008; Morris et al., 2010; National Transit Institute, 2004) it has been found that public participation is most effective when participation plans are defined, when funding is provided for participation activities, when public participation occurs early in the process and on a continuous basis, when complete information is provided to the public, when there is broad outreach to a diverse population, and when an agency is responsive to the public input received. These characteristics were measured discretely as dichotomous or ordinal variables. The characteristics are operationalized as described in Table 4.

745 **Table 4: Operationalized Definitions of Characteristics of Public Participation**

Variables		Operationalized Definition	Measurement
Characteristics of Participation	Well Defined Participation Plan	The adopted Public Participation Plan is well defined. Criteria include: (1) There are specific goals for achieving public participation; (2) Objectives are listed for accomplishing each goal; (3) Measures of effectiveness or performance are identified.	Dichotomous: Yes or No No = 0 to 1 criteria met Yes = 2 to 3 criteria met
	Funding Level	The percentage of the overall budget allocated to public participation activities and public outreach in the Unified Planning Work Program for the year during which the metropolitan transportation plan was adopted.	Ordinal: Low = < 5% Medium = 5 to 10% High = > 10%
	Early and Continuous Participation	Public participation was conducted multiple times and at key decision points throughout the development and adoption of the metropolitan transportation plan. Key decision points include: (1) initiation, (2) the development of alternatives, (3) development and the adoption of the draft plan, (4) and the adoption of the final plan.	Dichotomous: Yes or No No= 0 to 2 criteria met Yes = 3 to 4 criteria met
	Complete Information Provided	Information asymmetry. The difference between the information available to decisions makers and staff and the information shared with the public. (1) All technical information was available to the public; (2) Technical information was shared using visualization tools; (3) Technical information was verbally explained to the public.	Dichotomous: Yes or No No= 0 to 2 criteria met Yes = 3 criteria met
	Broad Outreach	Diversity in the target audience and techniques used for public participation activities. Criteria include: (1) More than five techniques were used to solicit and gather input; (2) Special Outreach to low-income and minority populations; (3) Outreach was geographically diverse; and (4) Multiple languages were used	Dichotomous: Yes or No No= 0 to 2 criteria met Yes = 3 to 4 criteria met
	Responsiveness	Staff was responsive to comments and concerns expressed by the public. Criteria include: (1) Specific comments were noted and considered in the body or appendices of the MTP; (2) Responses were provided to comments received; (3) Customer satisfaction was captured or considered as a part of the MTP process.	Dichotomous: Yes or No No= 0 to 1 criteria met Yes = 2 to 3 criteria met

746

747 The second variable, the level of engagement, reflects the degree to which the public is

748 involved in the process of making a decision (Arnstein, 1969; Connor, 1986; Dorcey &

Economy, 1994; IAP2, 2007; Wiedemann & Femers, 1993). Distinctions are drawn between "communication", in which the public has no input and is only the recipient of information, and "participation", in which public input is allowed (Innes & Booher, 2004) and provided to decision-makers in the process.

Engagement levels can range from public information and the public's "right to know" to ongoing involvement and participation in final decisions (Dorcey & Economy, 1994; Wiedemann & Femers, 1993). In this study, a hybrid of definitions of the levels of engagement as defined by Wiedemann and Femers (1993) and Dorcey (1994) are used. The level of engagement is defined using the "Levels of Public Impact" included in the 2007 IAP2 Spectrum of Public Participation (See Figure 3). This adopted tool is used by public participation practitioners on an international level and is accepted in the field as a vetted tool for assessing the level of engagement for participation activities (IAP2, 2007; North Carolina Department of Transportation, 2009). It is also consistent with the literature on levels of public participation. This spectrum describes the levels of engagement as "Inform", "Consult", "Involve", "Collaborate", and "Empower". Using this scale to measure the levels of engagement, the lowest form of engagement is "Inform" and the highest level is "Empower". These levels of engagement are operationalized in table 5.

A review of public participation techniques employed by Virginia's MPOs showed that various public participation techniques have been used to accomplish participation in the development of the metropolitan transportation plan. The North Carolina Department of Transportation has developed a toolbox that includes a comprehensive list of public participation techniques. These techniques have been examined and associated with one or more of the levels of participation of the IAP2 Spectrum of Public Participation. This list of techniques, found in

Appendix A, was used as a reference in the determination of the level of engagement of the techniques employed by the subjects of this study. The determination of the level of engagement was also a function of which techniques were used at what point in the project development process.

Table 5: Levels of Engagement

Variable		Objective	Operationalized Definition	Measurement
Level of Engagement	Empower (High)	To place the final decision in the hands of the public. The Public votes on final decision.	In addition to "Involving" and "Collaborating" with the public, a citizen representative votes on the MPO Board on final adoption of the MTP or the Board agrees to act based solely on the recommendation of the public.	Ordinal Variable (High, Medium-High, Medium, Medium-Low, and Low)
	Collaborate (Medium-High)	To partner with the public and/or citizens in the development of alternatives and the identification of preferred solutions. The public is involved in assessing risks and recommending solutions.	Information was gathered through public participation techniques to decide which projects would be included in the MTP. In addition to "Involving" the public, the MPO staff and/or decision makers gathered input from the public (or Citizens Advisory Committee) in the project selection and/or prioritization process for the draft MTP.	
	Involve (Medium)	To work with the public and/or citizens in the process to ensure that public concerns are understood and considered. The public is involved in the identification of issues and determining the agenda.	Information was gathered through public participation techniques to develop the vision, goals and/or alternatives for the MTP. The MPO staff and/or decision makers gathered and used input from the public (or citizen representatives of the general public) to set the course and generate alternatives. Evidence exists that citizen input was gathered and used to rule out or advance aspects of the MTP.	
	Consult (Medium-Low)	To obtain public feedback and perspectives. The public has a right to voice objection.	Citizens were "Informed" and comments were solicited as a part of public participation.	
	Inform (Low)	To educate and inform the public. The public has a right to know.	Public participation techniques were used to share information on the MTP with the general public and target audiences.	

The third independent variable in this study is deliberation. Webster's dictionary defines deliberation as "discussion and consideration of all sides of an issue" or "thoughtfulness in

decision making". According to the literature, "Deliberation refers either to a particular sort of discussion – one that involves the careful and serious weighing of reasons for and against some proposition – or to an interior process by which an individual weighs reasons for and against a course of action." (Abelson et al., 2002; Fearon, 1998). In public participation, deliberation can be achieved in a number of ways. For this study, deliberation focuses on the manner of interaction between the public and the MPO staff and/or decision makers. The public participation techniques used by the MPOs under evaluation have been reviewed to determine if deliberative approaches were used. A public participation technique is considered to be deliberative if all of the following aspects were a part of the public participation process or activity:

- Information related to the decision was provided to citizens;
- Citizens were provided the opportunity to review, discuss and debate the issues and options;
- Citizens were provided an opportunity to reach an agreed upon decision either with MPO staff, decision makers or among themselves; and
- Decision makers received feedback or recommendations that are reflective of the outcome of the public participation.

Based on the definitions provided for the "level of engagement" variable, for this study, deliberation can only take place at the "Consult", "Involve", "Collaborate", and "Empower" levels of engagement. While it is possible that all levels of engagement could take place without deliberation, I anticipated that deliberation would be present at the higher levels of engagement such as "Involve", "Collaborate", and "Empower". Techniques such as surveys, focus groups,

public notice and public education are normally considered non-deliberative. Deliberation is usually found in techniques such as public hearings, Citizen Advisory Committees, citizen juries and panels, consensus workshops and conferences (Beierle, 1999). In this study deliberation could have occurred at any point in the process for developing the Metropolitan Transportation Plan and is related to the manner by which public participation was conducted and not the level of engagement. The operationalized definition for deliberation is included in Table 6.

Table 6: Operationalized Descriptions of Factors and Variables

Variable	Objective	Operationalized Definition	Measurement
Deliberation	To provide the public with an opportunity to review, discuss and debate information, issues and options associated with a decision.	- Information related to the MTP was provided to citizens; - Citizens were provided the opportunity to review, discuss and debate the information; - Citizens were provided an opportunity to reach an agreed upon decision either with MPO staff, decision makers or among themselves; and - MPO Staff or Board received individual or collective feedback or a recommendation that is reflective of the outcome of the deliberation process.	Dichotomous– Yes/No

Dependent Variable

The common dependent variable across all hypotheses is the degree to which Metropolitan Transportation Plans reflect public input. This variable measures how the outcome of the planning process (the metropolitan transportation plan) compares to the input that was received from the public (findings, comments and recommendations).

The Metropolitan Transportation Plan (MTP) is the 20-year plan that identifies planned transportation improvements for a metropolitan region. According to the Code of Federal

Regulations, the plan is a comprehensive listing of long-range and short-range strategies and actions that lead to the development of an integrated multimodal transportation system that addresses existing and future transportation demand. The MTP is updated on a four to five year cycle and is developed and approved by the MPO. Because the MTP is developed in several steps, for each MPO included in this study, it was necessary to assess decisions made or actions taken by the board at key points in the process. These points include (a) initiation, (b) alternatives development, (c) draft plan adoption, and (d) final plan adoption. The degree to which the MTP reflects public input is measured by the content of the plan and whether or not it reflects the public input received.

An assessment of the input gathered from employed public participation techniques conducted in association with the development and adoption of the metropolitan transportation plan was conducted. In order to compare the input received to the decisions made, the data outputs from the various participation techniques were analyzed to determine common themes, or specific recommendations. This information was compared to the content of the Metropolitan Transportation Plan to determine if the content of the plan reflects the input received. The data collection and analysis procedures for accomplishing this step are described in Chapter 3. The dependent variable is operationalized in Table 7.

Table 7: Operationalized Definition of "Public Input is Reflected in Decision"

Variable	Operationalized Definition		Measurement
Public Input Reflected in the Plan	Negative Outcome	The alternatives, recommendations, or projects in the draft and/or final MTP do not reflect the input received. (-2 points for each instance)	Each level is nominal (Yes/No) but can be measured in an ordinal manner (1 being lowest and 4 being highest)
	Inherent Outcome	The alternatives, recommendations or projects in the draft and/or final MTP are considered to previously or inherently reflect the input received. (+1 points for each instance)	
	Positive Outcome	The alternatives, recommendations, or projects in the draft and/or final MTP reflect the input received. (+2 points for each instance)	

Extraneous variables related to transportation planning were considered and controlled for where possible. Consideration was given to legacy projects, limitations on available project funding (i.e. vision plans as well as fiscally constrained plans were considered), and political factors beyond the scope of the planning process (i.e. tax increases for transportation funding).

Definition of Other Terms

Relevant terms have been described below:

"Decision maker" is used here to identify individuals or groups with the authority and responsibility to make decisions on behalf of an agency or other governmental body. Their decisions directly impact the progress, direction, and final outcome of a project or study.

"Public" or **"General public"** is used in reference to the public at large. This would be the entire universe of people impacted or interested in a specific program, project, or study. The public is defined as users of transportation systems in the state. These users include residents, visitors, business owners, students, commuters, and a host of others. The general public includes special populations such as young people; racial and ethnic minority groups; low-income, low-

literacy, and those with Limited English Proficiency (LEP); the elderly; persons with disabilities (including those with hearing or sight impairments); and those with limited mobility opportunities.

"Public Participation" is a process by which stakeholders and members of the general public provide input to decision makers so as to influence the outcome (Dalal-Clayton, Dent, & Dubois, 2003) of public policy. It can also be described as "the practice of consulting and involving members of the public in the agenda-setting, decision-making, and policy-forming activities of organizations or institutions responsible for policy development" (Rowe & Frewer, 2004). For this study, public participation does not include input from federal, state, and local government agencies. The terms public involvement and public participation are used synonymously.

"Public Participation Plan" is a documented participation plan that defines a process for providing citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process (DOT, 2007). The adopted public participation plan (PPP) is key to public participation activities carried out by the MPO and is the MPO document that defines how participation itself is planned, implemented, and presented to the public.

"Public participation techniques" are the approaches used to conduct public participation. For the purposes of this study, this will represent the public participation activities used by Metropolitan Planning Organizations (MPOs) to fulfill the adopted public participation plan. A list of techniques employed by the MPOs in this study is provided in Appendix B.

"Stakeholder", in contrast to public, is used to identify a small section of the public with particular interests, concerns, information, and/or constituencies that require a more intensive outreach approach.

"Visualization Techniques" are methods used to show information in clear and easily understood formats such as maps, pictures, or displays. The results can be simple or complex and include graphs, pie charts, photo composites and photosimulations, artist's renderings, wire-frame illustrations of 3D forms, interactive maps, and animations such as walk-throughs and drive-throughs.

CHAPTER 3: RESEARCH METHOD

This research is exploratory in nature and employs a primarily quantitative approach supported by the use of some qualitative data collection methods. The research is conducted in three phases and is based on aspects of the exploratory design instrument development model, as described by Creswell and Clark (2007). The intent of the multi-phased exploratory design is that the results of the methods employed in earlier phases can help shape and inform the approaches of the later phase (Creswell & Clark, 2007; Greene, Caracelli, & Graham, 1989). This design is based on the premise that an exploration is needed to gain a better understanding of the phenomenon being studied (Creswell, Plano Clark, Gutmann, & Hanson, 2003). This exploratory approach is appropriate when a researcher wants to generalize results to different groups (Morse, 2006), to test aspects of an emergent theory or classification (Morgan, 1998), or to explore a phenomenon in depth and then measure its prevalence (Creswell & Clark, 2007). This design is appropriate for this study because the in depth exploration of the public participation practices of MPOs relied heavily upon a systematic analysis of existing data sources to develop metrics for hypothesis testing and the generalization of findings. Though this study is primarily quantitative in nature, it is similar to a mixed method strategy. The first phase of the study borrows some aspects of a collective case study to gain a better understanding of public participation practices used in transportation planning. The later phases use the information gathered in the first phase to produce quantitative metrics for quantitative analysis. Mixing aspects of qualitative data collection into a quantitative study is a very worthwhile alternative for consideration. Quantitative data and analysis are commonly based on qualitative

judgment (Marshall & Rossman, 1989; Maxwell, 2005). The methods used to conduct this study will be described in further detail later in this chapter.

Study Population

This study was completed amongst the fourteen Metropolitan Planning Organizations representing metropolitan areas in the Commonwealth of Virginia. A Metropolitan Planning Organization (MPO) is defined in Federal Transportation Legislation (23 USC 134(b) and 49 USC 5303(c)) as the designated local decision-making body that is responsible for carrying out the metropolitan transportation planning process. An MPO must be designated for each urban area with a population of more than 50,000 people (i.e., for each Urbanized Area defined in the most recent decennial Census) (DOT, 2007). MPO operations vary from one state to the next due to different state laws and policies that may be in place. Though the same federal requirements for public participation apply nation-wide, variations in MPO oversight by federal and state offices as well as possible differences in funding scenarios for transportation planning activities may exist from state to state. To reduce the presence of extraneous factors that may affect the study outcome, I decided to conduct this study among the MPOs that oversee the transportation planning activities for the metropolitan areas in Virginia. The MPOs responsible for metropolitan transportation planning in Virginia include the following:

Table 8: Virginia Metropolitan Planning Organizations

MPO Name	Major City	Urban Area Population (2010)
Blacksburg-Christiansburg-Montgomery MPO	Christiansburg	79,260
Bristol MPO*	Bristol, TN	93,307
Central Virginia MPO	Lynchburg	153,316
Charlottesville-Albermarle MPO	Charlottesville	113,074
Danville MPO	Martinsville	65,689
Fredericksburg MPO	Fredericksburg	275,639**
Hampton Roads MPO	Chesapeake	1,618,505**
Harrisonburg-Rockingham MPO	Staunton	74,365
Kingsport MPO*	Kingsport, TN	125,260
National Capital Region TPB*	Washington	4,991,324**
Richmond MPO	Richmond	934,060**
Roanoke Valley Area MPO	Roanoke	227,507**
Tri-Cities MPO	Petersburg	149,029
Winchester-Frederick MPO	Front Royal	78,440

Source: FHWA MPO Database, November 2012 *Multi-State MPOs **TMA Areas with population >200K

Since this study examines the public participation activities of the MPOs in Virginia, it is logical and convenient to conduct the study among the entire population of MPOs. To be included in the study, MPOs had to have adopted a public participation plan which outlines how it conducts public involvement for the transportation planning and programming activities in the region. The MPO also had to have adopted a metropolitan transportation plan and conducted public participation as a part of the plan development process. Since it is a federal regulatory requirement that both a plan is updated and adopted at least every four or five years and public participation be conducted as a part of the planning process, it was found that all MPOs met the criteria for being included in the study. The level of analysis is the MPO. A Map depicting the MPOs areas in Virginia is included in Appendix C.

Research Methods:

As previously stated, this study seeks to answer the following research questions:

1. What are the characteristics of public participation conducted for transportation planning by Virginia's Metropolitan Planning Organizations?
2. Are Metropolitan Transportation Plans reflective of the public input received?
3. Is there a relationship between the characteristics of public participation and the degree to which Metropolitan Transportation Plans reflect public input?
4. Is there a relationship between the level of engagement of public participation and the degree to which Metropolitan Transportation Plans reflect public input?
5. Does deliberation result in Metropolitan Transportation Plans that are more reflective of public input?

By definition, mixed methods is a procedure for collecting, analyzing, and "mixing" or integrating both quantitative and qualitative data at some stage of the research process within a single study for the purpose of gaining a better understanding of the research problem (Creswell & Clark, 2007; Tashakkori & Teddlie, 1998). As previously mentioned, this study is largely quantitative in nature, but employs some aspects of qualitative data collection to gain a better understating of public participation practices among the population.

A multiple (or collective) case study enables the researcher to explore differences within and between cases with the goal of replicating findings across cases (Yin, 2003). Because comparisons are drawn, it is important that cases are chosen carefully so that the researcher can predict similar results across cases, or predict contrasting results based on a theory (Yin, 2003). According to Yin (1989) a case study strategy is appropriate when there are multiple sources of evidence, when the researcher has no or limited control of the events being studied, when a deep

understanding of how and why events occur is desired, and when the object of study is an event in a real life context. The collective case study approach investigates several cases to gain insight into a central phenomenon (Creswell, 1994; Stake, 1995; Yin, 2003) in this case, public participation in transportation planning. In the exploratory phase of this study, I employed aspects of a collective case study in an effort to gain a better understanding of how citizen participation works in practice, which is consistent with the principles of qualitative research (Creswell, 1994; Marshall & Rossman, 1989). There are five components to case study research design, including (a) study questions; (b) propositions; (c) unit(s) of analysis; (d) the logic linking the data to the propositions; and (e) the criteria for interpreting the findings (Yin, 2003). Case studies are also described as a research method in which the researcher explores an entity or phenomenon bounded by time and activity and collects detailed information using a variety of data collection procedures during a sustained period of time (Creswell, 1994). The first research question in this study, "What are the characteristics of public participation conducted for transportation planning by Virginia's Metropolitan Planning Organizations?", is exploratory in nature. Though full case studies were not conducted for each MPO in the study and content analysis of existing documents was the sole data collection procedure, aspects of case study research were used to gain an understanding of each MPO in this study, resulting in a collective study of all of Virginia's MPOs.

Case studies are qualitative in nature but there are primary drawbacks to this research approach. It is often difficult to generalize the results of case studies so that they are applicable to other scenarios and further research is often needed to substantiate findings (Creswell, 1994). Employing a multi-phased research design in which quantitative methods are used to explain the results of qualitative data collection (in this case the in-depth study and summarization of public

documents) can be beneficial. The qualitative analysis of archived data was used to formulate metadata for quantitative analysis.

Content analysis can be a useful technique for discovering and describing the focus of individual, group, institutional, or social attention (Stemler, 2001). It enables researchers to sift through large amounts of data in a systematic fashion (Holsti, 1969; Stemler, 2001). Content analysis can be conducted on several sources of recorded communication (transcripts of interviews, meeting minutes, discourses, protocols of observations, video tapes, reports, documents, etc.) (Stemler, 2001). The content of documents can be analyzed qualitatively and quantitatively to produce data for the analysis of a phenomenon. While quantitative content analysis analyzes the manifest content of the material themes and main ideas of the text as primary content, qualitative content analysis is defined as an approach of empirical, methodological controlled analysis of texts within their context, following content analytical rules and step by step models, without rash quantification (Mayring, 2000). This study primarily used quantitative content analysis to gather data about the study subjects, but also included consideration of the context in which public participation was conducted.

Data gathered through the content analysis were transformed into quantitative metrics to provide a framework to answer the research questions and identify relational patterns between the independent and dependent variables. By taking this approach, I am able to better define the research problem in more specific and set terms and clearly and precisely specify the variables under consideration, and minimize subjectivity of judgment (Kealey & Protheroe, 1996; Nachmias & Nachmias, 2000).

Mixed methods were used to add scope and breadth to a study and it was advantageous to combine methods to provide a better understanding of the public participation efforts used by

MPOs (Creswell, 1994; Creswell & Clark, 2007; Swanson, 1992). The use of similar approaches has been employed more often in health research, education research, and public health education (Creswell et al., 2003; Tashakkori & Teddlie, 1998). Though hypotheses have been proposed and independent and dependent variables have been defined, some aspects of inductive research were integrated into this study to further define the identified variables. Data collection and analyses were conducted sequentially, allowing for emerging themes and variable refining as the study progressed (Marshall & Rossman, 1989; Thomas, 2006).

This study was conducted using an exploratory design with a variation of the instrument development model (Creswell & Clark, 2007). A visual diagram of this model is provided below.

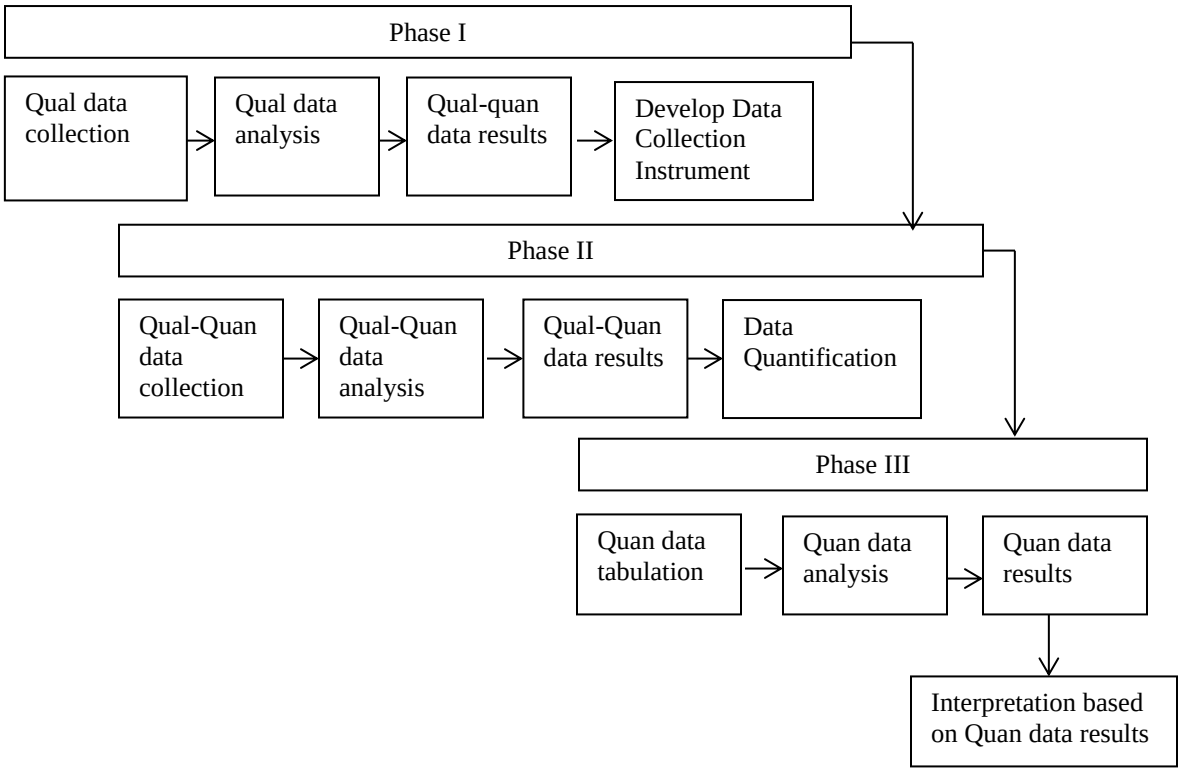


Figure 4: Exploratory Research Design: Instrument Development Model

Data Sources:

Existing data from primary sources were used exclusively to conduct this study. The use of exiting (or secondary) data is appropriate for several reasons. First, the proposed data streams are in existence and readily available for use, providing ease of access to relevant sources. Substantively, since this study examines the aspects of past public involvement activities and events for fourteen MPOs across Virginia, secondary data enables the use of a wider range of materials covering larger areas and longer periods of time than would be possible using primary data (Marshall & Rossman, 1989; Nachmias & Nachmias, 2000). The use of existing data in this study allowed me to better understand the context of each case, and by analyzing data collected in different cases at differing periods of time on similar issues, the available data and documents provided a breadth of information for analysis that would not have been easily available otherwise (Nachmias & Nachmias, 2000; O'Sullivan, Rassel, & Berner, 2002; Yin, 2003). () Other advantages to using secondary data include data stability (can be reviewed repeatedly), data exactness, and the fact that the data collection method was unobtrusive (Yin, 2003).

There are methodological advantages of using secondary data that have relevance for this study. Secondary analysis may improve the validity of measurement by expanding the scope of the independent variables employed when these concepts are operationalized (Nachmias & Nachmias, 2000; Yin, 2003). Also, when secondary data are reliable and accurate, opportunities exist for replication. Because the documents that provided data for this study are federally required to be maintained by MPOs, the opportunity for replication of this study and possible longitudinal applications exist (Nachmias & Nachmias, 2000). Another substantive consideration is that in the past I have professionally been responsible for providing oversight of the planning process for seven of the fourteen MPOs in Virginia. My history as a federal agent

could possibly affect the objectivity of responses provided by MPO staff if primary data were collected via surveys or interviews. In this case, the use of secondary data helped avoid response bias and reflexivity, where the interviewee or respondent gives responses based on what he or she thinks the interviewer wants to hear (Yin, 2003). Various streams of archival data, existing documents, and agency websites were used to collect data for this study.

Integrated Data Collection and Analysis:

Data collection and analysis were integrated from the beginning of this process. To answer the research questions and test the proposed hypotheses, my research was conducted in three phases. Phases I and II consisted of a systematic process inclusive of the following five steps:

1. Compilation of MPO Profiles;
2. Development of MPO Public Participation Characterization;
3. Assessment of Public Participation Techniques Used;
4. Review of Public Participation Outputs and Checklist Development;
5. Checklist Review of MTP and MPO Scoring and Evaluation.

Data collection and analyses were conducted sequentially, allowing for emerging themes and variable refining as the study progressed (Marshall & Rossman, 1989; Thomas, 2006). The data collection protocol is provided in Appendix D. This protocol was refined when needed throughout the data collection process, but did not veer far from the outlined course. A systematic approach to data collection was required and taken. Phase I included a review of each MPO and a study of the public involvement procedures that were used to develop the current

Metropolitan Transportation Plan (MTP). Table 9 describes the descriptive information that was captured.

Table 9: MPO Descriptive Information

MPO Name	***The name of the MPO inclusive of the major cities***
Population	*The MPO's population as of the 2010 Census*
TMA/Non-TMA	*If the MPO has a population larger than 200,000, it will be designated as a Transportation Management area and required to fulfill additional federal requirements.*
Member Jurisdictions	*A list of the member jurisdictions.*
Number of Voting Members	*The number of voting members assigned to each member jurisdiction and transportation agency.*
Voting Structure:	*An indication of if the MPO has equal or weighted voting among its members.*
Meeting Schedule:	*A description of how often the MPO meets.*
Meetings Open to Public:	*An indication of if MPO meetings are open to the public.*
Other Committees	*A list of other committees that support the MPO planning process.*
Funding Year	*The fiscal year of the Unified Planning Work Program (UPWP) in place when the Metropolitan Transportation Plan was adopted.*
Public Participation Plan Date	*The date of the adopted Public Participation Plan.*
MTP Adoption Date	*The adoption date of the current Metropolitan Transportation Plan.*
MTP Development Timeline	*The time span between when the Metropolitan Transportation Plan was initiated and when it was adopted.*
Public Involvement for MTP	*A description of the process employed by the MPO to conduct public involvement for the development of the Metropolitan Transportation Plan.*

Using the data gathered in this phase, I developed a profile of each case with descriptive information about the MPO and specific details about how the organization conducted public involvement for the MTP. These data were then used to gain a better understanding of issues intrinsic to the cases and gather insight into public involvement in Virginia's MPOs (Creswell,

1994; Stake, 1995; Yin, 2003). Holsti (1969) defines content analysis as, "any technique for making inferences by objectively and systematically identifying specified characteristics of messages" (p. 14). Through a systematic, qualitative analysis of the content of MPO Websites, Public Participation Plans (PPP), the MPO's Unified Planning Work Program (UPWP), and the public involvement section of the MTP along with other available existing documents and information, I was able to extract metadata about the characteristics of the public participation programs of the MPOs under review. Content analysis enables researchers to sift through large volumes of data with relative ease in a systematic fashion (Holsti, 1969; Stemler, 2001). It can be a useful technique for discovering and describing the focus of individual, group, institutional, or social attention (Stemler, 2001). For the development of the MPO profiles, data were gathered through deductive content analysis because "the structure of analysis is operationalized on the basis of previous knowledge" and a deductive approach is based on a predetermined theory or model and therefore it moves from the general to the specific (Elo & Kyngäs, 2008). The MPO websites, PPP, UPWP, bylaws, prospectus, meeting minutes, and other available sources were examined to explore the identified variables that characterize public participation for each MPO (goals, funding, early and continuous participation, the provision of complete information, broad outreach, and responsiveness). Based on the definitions provided for each of these characteristics in Table 4 in the previous chapter, I was able to gather needed data to measure each characteristic through a review of MPO documents and capturing the metadata in the electronic MPO profile document. It was expected that in some instances data would not be available on the MPO's websites. In those cases I submitted a letter to the MPO Director requesting the data be made available by email. A sample of this letter is included in Appendix E.

I also deductively analyzed the MTP and its appendices as well as MPO website mining for data to determine the public participation techniques that were used by the MPOs in the development of the MTP. These techniques were categorized based on the phase of the MTP development process during which they were employed, the level of engagement, and inclusion of deliberation. The matrix in Table 10 depicts an example of the table that was developed for each MPO.

Table 10: Sample Public Participation Matrix

Technique Used	Phase of Plan Development:				Inform	Consult	Involve	Collaborate	Empower	Deliberation (Y/N)
Name	Initiation	Alternatives Development	Draft MTP	Final MTP						
Open Public Comment Period			X			X				N
Public Information meeting		X			X	X		X		Y
Public Hearing (During MPO Meeting)			X		X	X				N
Website		X	X	X	X	X				N

As mentioned in Chapter 2, level of engagement concepts provided a theoretical basis for this study. In determining the level of engagement, I had to closely examine the point during the MTP development process that certain techniques were used to determine the level of engagement. Many of the techniques that were employed were not exclusive to one level of engagement but could be implemented for several different levels of engagement. For example, surveys we used by several MPOs during the development of their MTPs. The Hampton Roads and Roanoke Valley MPOs used surveys at the plan initiation stage to help develop a regional

vision and generate goals and identify alternatives for the MTP. This allowed for the survey results to be used to "Involve" the public. On the other hand, the same technique was used by the Bristol and Fredericksburg MPOs as a part of the public participation activities to get feedback on the draft plan. In this case, the survey was used to "Consult" with the public, which is a little lower on the level of engagement scale. In order to correctly evaluate the practices of the MPOs, these details were given particular attention.

Similar consideration had to be given for determining if deliberation was employed by the MPOs in the development of their plans. An example for consideration is the application of focus groups as a participation technique. Focus groups were used by the Hampton Roads, Roanoke Valley, and Central Virginia (Lynchburg) MPOs. Focus groups are not usually identified as a deliberative technique because they don't normally involve detailed discussions of factors and weighing of options (Carson, 2006). While in Hampton Roads and Roanoke Valley focus groups were used in their traditional manner to identify common issues among different groups, the Central Virginia (Lynchburg) MPO employed focus groups in a manner similar to Deliberative Workshops (Carson, 2006). The groups were convened over several months and were provided important information to lead participants in generating ideas and recommendations. At the end of each focus group meeting, the facilitators took the information and tools (maps, notes, etc.) generated by the group and used the meeting outputs to generate specific recommendations for the MTP growth scenarios.

Phase I resulted in a detailed profile of each MPO and the public participation that was employed for the development of the MTP. This information, along with the descriptive information described above, was used to answer research question one, “What are the

characteristics of public participation conducted for transportation planning by Virginia's Metropolitan Planning Organizations?"

In Phase II of this study, I reviewed the public input that was gathered for the development of each MPO's MTP to gain an understanding of the opinion of those that participated in public involvement activities on the transportation planning process, transportation issues and specific projects. Analyzing the available data (raw and summarized) that was collected by MPOs during public participation activities allowed me to categorize input received based on similarity. Inductive content analysis using open coding is used when there is not enough former knowledge about the phenomenon being studied or if this knowledge is fragmented (Elo & Kyngäs, 2008). An approach based on inductive data moves from the specific to the general so that particular instances are observed and then combined into a larger whole or general statement (Elo & Kyngäs, 2008). This method was most appropriate for categorizing the public comments in this phase of the study.

Input received usually came in the form of tabulated survey results, reports from focus groups and workshops, individual comments submitted by email, comment cards collected at public meetings, or a summary of verbal comments submitted at a meeting, or even telephone messages. After a few cases were analyzed, a pattern emerged. Comments usually fell into one of four categories: goals for regional mobility, mode specific comments, project specific recommendations, or suggestions related to funding. To ease the data collection process, I used a version of the sheet found in Table 11 to collect and analyze the public input. Direct data entry was employed (Nachmias & Nachmias, 2000).

Table 11: Public Input Data Collection Tool

Theme	Example Sources of Input	Example Associated Technique	Examples of Possible Comments
Goal	Survey Results	Survey	- *Linking Transportation and Land Use is Very Important* - *Improve Traffic Operations*
Mode	Focus Group Report	Focus Group	- *We need more buses between the Peninsula and Norfolk Naval Base* - *Bicycles and Sidewalks are Somewhat Important*
Project	Comment Sheet	Workshop	- *I oppose the Harrisonburg By-Pass* - *Build the 3rd Crossing NOW!*
Funding	Email	Open Comment Period	- *Please do not toll 460* - *While I am not opposed to a higher gas tax, the money shouldn't be used for transit*
Other	Summary of Verbal Comment	Public Hearing	- *The funding data in the plan does not appear to be correct based on my calculations*

This was a very labor intensive process, particularly for larger more populous areas. When comments were repeated or it became evident that a letter (or email in most cases) writing campaign was underway in favor of or against a project, I tallied similar comments. For example, the Nation Capital Area MPO received 157 comments requesting that spot improvements be made on Interstate 66 in Fairfax, Virginia. This comment was only listed once when the checklist was developed. The same was done for other similar comments or requests related to a particular mode or goal. My goal was not to focus on the number of comments that were received by any one MPO, but to gain a sense of the public's wishes when it came to transportation planning in the region and if those wishes were included in the transportation plan. The results of the content analysis were used to develop a checklist of collective feedback (a list of summarized input or requests received) for each MPO. This checklist was then compared to the content of the MTP for inclusion to determine if public input was reflected in the MTP.

The checklist analysis process posed a few challenges. As mentioned previously, the dependent variable in this study is the degree to which the plan reflects public input. After generating the checklist of public input, the task of assigning a value for the extent to which the plan reflected the input required careful consideration. One option was to take a simplistic approach and evaluate this variable in a dichotomous manner – "Was the input reflected in the plan?" - yes or no. However, I thought it was important to add value to this variable to account for how the MPO approached including public input in the planning process. Is the inclusion of legacy projects (those projects that were already programmed and committed) equivalent to including a new project that is generated from public input? Also, if an MPO receives overwhelming input in opposition to a project but still includes the project in the plan despite public outcry, how is that accounted for? In an attempt to address this issue, I developed a scale that assigned a positive, negative, and neutral (or inherent) value to this variable. If it was found that the input was not reflected in the plan, it was considered a "Negative Outcome". In some cases it was found that the alternatives, recommendations or projects in the MTP were already reflective of the sentiment of public input. For example, most MTPs include a chapter dedicated to transit and transportation demand management strategies (i.e. carpool, park and ride lots, etc.). If a comment was received that stated, "I would like to see more buses at the Park and Ride lot on Gaskins Road", that comment would be considered to have previously or inherently been reflected in the MTP, therefore yielding an "Inherent Outcome". When evidence existed that project alternatives and program recommendations were generated as a result of the public participation process and then included in the Plan, it was considered a "Positive Outcome".

Following this crosscheck of the Plan and the generated checklist, a score was calculated for each MPO based on the following calculation:

Score = (2 x each positive outcome) + (1 x each inherent outcome) + (-2 x each negative outcome)

This scoring tactic accounts for positive and negative outcomes but still gives an MPO credit for developing a plan that is already consistent with public sentiment. Based on the final scores, the MPOs were placed into one of two categories: those having plans that are more reflective of public input and those having plans that are less reflective of public input. MPOs with scores higher than five were placed in the "more reflective" category and the remainders were considered "less reflective".

The outputs of this phase were used to answer research question two, "Are Metropolitan Transportation Plans reflective of the public input received?" At the conclusion of Phase II, this information was measured based on its dichotomous or ordinal value and tabulated into the data collection instrument.

The data generated in phases I and II were reviewed and cross checked multiple times for accuracy and consistency in application. These data provided the basis upon which the hypotheses would be tested and the research questions could be answered, so accuracy and consistency were paramount. The complete results of Phases I and II can be found for each MPO in Appendices E through R.

Quantitative Data Analysis

In Phase III of this study, the quantitative analysis of the data collected in Phases I and II was conducted. Quantitative data analysis has been described as the process of bringing order,

structure and understanding to large amounts of collected data and a search for general statements about relationships among categories of data (Marshall & Rossman, 1989). The three-phased approach employed in this study required that data analysis be conducted as an activity simultaneously with data collection, data interpretation, and data summary (Creswell, 1994), though it was done in a successive manner as depicted in Figure 4. By quantitatively analyzing the results of the data collected in the previous section, I was able to better define the research problem in more specific and set terms and clearly and precisely specify the defined variables (Nachmias & Nachmias, 2000), helping to reduce subjectivity of judgment (Kealey & Protheroe, 1996).

Cross-tabulation was used to analyze the data and test the hypotheses. Cross tabulations are a useful analytical tool for analyzing nominal and ordinal data. Cross-tabulation tables are contingency tables that can be used to analyze and record the relationship between two or more categorical variables (Andersen, 1980; Bishop, Fienberg, & Holland, 1975). The cell frequencies of a cross-tabulation provide some information regarding whether changes in one variable are statistically related to changes in another (Bishop et al., 1975). Because the sample size for the study is small (n=14), it is unlikely to see patterns or draw statistical significance from the results of a cross tabulation (Nachmias & Nachmias, 2000). However, cross tabulations will be helpful to see if patterns exist between the independent variables and the dependent variable. Analyses were done using the cross tabulation function in SPSS. Data were not available to complete the Phase II analysis for the Kingsport, TN MPO, so it was not included in the analysis, resulting in n=13. Chi-square tests were run for each set of analysis, but because of the small sample size, the results are inconclusive. This analysis was conducted to get a sense if there are relationships between the independent variables (the characteristics of public

participation, the level of engagement, and the use of deliberation) and the dependent variable (the reflection of public input in the Metropolitan Transportation Plan). The results of these analyses are capture in Chapter 4.

Methodology Limitations

It is important to note the methodological limitations presented by certain aspects of this study. Though there are many benefits to qualitative research, such as the adapted form of a collective case study conducted in this study, it is widely accepted that the results of qualitative research have challenges in conclusively proving relationships between variables (Creswell, 1994; Kealey & Protheroe, 1996; Nachmias & Nachmias, 2000). Using quantitative approaches helps in this aspect (Marshall & Rossman, 1989). Additionally, the use of secondary data poses some concerns. Rigorous analysis is necessary when attempting to analyze large amounts of data or transcribe information (Creswell, 1994). Also, information may be incomplete or limited compared to what may be needed to answer the research questions, since only existing data is available (Creswell, 1994; Nachmias & Nachmias, 2000). Using existing documentation and archived records may also expose weakness to reporting bias (the information reported reflects the bias of the author, i.e. public officials) and bias in selectivity (Yin, 2003).

It should also be noted that though the variables for level of engagement and deliberation have been operationalized for the purposes of this study, due to the exploratory nature of this dissertation, the concept of deliberation has been simplified for operational purposes. This study does not include an exhaustive analysis of types and quality of the deliberation as a part of the public participation activities employed by the MPOs in this study. Also, while this study focuses on the importance of public input in transportation planning, it is recognized that

transportation planning is a technical field and the recommendations of professionals should play a significant role in guiding the planning process. Though public input and comments from the general public were analyzed as a part of this study, this dissertation does not judge the technical validity or soundness of the input received. No assessment was done on the comments submitted by the public other than determining if they were represented by the content of the Metropolitan Transportation Plan. Lastly, the small sample size of this study (n=14) makes some forms of quantitative analysis difficult to accomplish (Gliner & Morgan, 2000).

It is important to note that because no primary data collection was conducted for this study, neither the professional staff nor the members of MPO policy boards were interviewed as a part of this study. Therefore, the findings of this study are based on the assessment of the researcher and not the MPOs in Virginia. In some cases, the data that were used to determine whether or not some of the criteria of the characteristics of the public participation were met for some of the MPOs (i.e. funding, the provision of complete information, etc.) were deduced based on my personal and professional judgment and may not coincide with the opinions of MPO staff. Being that I was only privy to information available via the internet websites or documents and reports provided by MPO staff, the results of this study are limited and do not reflect the full range of knowledge of the MPO staff and board members regarding the public input that was collected and the degree to which the MTP reflects that input.

Regarding the public input that was received, it is important to note that the results of public participation that were considered in this study are not necessarily representative of the entire population of the metropolitan area and cannot be generalized to the entire population. Though there are references to “public sentiment”, in most cases the public input that was received was likely representative of individual interests or certain subsets of the population.

The limitations of the research design pose some threats to internal and external validity. Regarding internal validity, the fact that the same information was not available for each case may introduce a weakness in the ability to compare the MPOs to each other in an equal manner. Because this study was conducted among MPOs in Virginia only, some results may not be generalizable to the entire population of MPOs around the country. Despite these limitations, valuable information can be gathered that can be used for practical and public administrative purposes.

CHAPTER 4: FINDINGS

Introduction

The purpose of this study is to examine public participation in transportation planning and how the level of engagement of public participation techniques and deliberation affect transportation planning decisions in metropolitan areas. By (1) exploring the characteristics of public participation in transportation planning at the MPO level, (2) studying and analyzing the public participation practices that have been used to support the development of the metropolitan transportation plan and the outputs from participation activities, and (3) considering how the level of engagement and use of deliberation have affected the participation process, this issue has been explored. This chapter presents the findings of this study in five parts: 1) an overview of public participation among Virginia's MPOs; 2) public input in metropolitan transportation planning; 3) linkages between the characteristics of public participation and public input in metropolitan transportation plans; 4) levels of engagement; and 5) deliberation.

Public Participation in Virginia's MPOs

I have had a long held interest in the approach that MPOs take to conduct public participation for transportation planning activities. In studying the public participation practices of Virginia's MPOs, I have found that while some aspects of public participation hold constant, there are various approaches being employed within the Commonwealth's metropolitan areas.

Well Defined Participation Plans:

The Public Participation Plan is the document that describes how an MPO will approach public engagement. An important question to ask is "What is a well-defined plan?" This study

included three criteria for public participation plans: the inclusion goals, objectives, and measures for effectiveness or performance. The fourteen MPOs in Virginia were evenly split – half were found to have well-defined public participation plans and half were not.

Table 12: Findings for "Well-Defined Plans"

Public Participation Plans included:				Well Defined Plan?
MPO	**(1) Goals**	**(2) Objectives**	**(3) Measures for Effectiveness/Performance**	
1. Blacksburg	No	No	No	No
2. Bristol	Yes	Yes	Yes	Yes
3. Central Virginia	Yes	Yes	Yes	Yes
4. Charlottesville	No	No	No	No
5. Danville	No	No	No	No
6. Fredericksburg	Yes	Yes	Yes	Yes
7. Hampton Roads	Yes	Yes	Yes	Yes
8. Harrisonburg	Yes	Yes	Yes	Yes
9. Kingsport	No	No	No	No
10. National Capital Region	Yes	Yes	Yes	Yes
11. Richmond	No	No	No	No
12. Roanoke Valley	Yes	Yes	No	Yes
13. Tri-Cities	No	No	Yes	No
14. Winchester-Frederick	Yes	No	No	No

While a few of the MPOs have followed the model of listing specific goals, objectives, and strategies in their participation plans, most took the approach of listing step by step procedures for how they plan to implement participation. Even those MPOs that were found to have a well-defined plan included "procedures" for conducting involvement. The problem with taking a procedural approach to participation rather than an approach based on desired outcomes is that an organization ends up focusing on ensuring that the procedure is followed rather than conducting participation based on preferred results.

Although it is a federal requirement that MPOs include in participation plans a mechanism for measuring effectiveness, six of the MPOs have not defined how they will measure the performance of their plans. This is not surprising given that, as stated above, most MPOs tend to use the public participation plan as a procedural document rather than an outcome-based, results-driven plan. Of those that include provisions for evaluating public participation, I found very few indications that the evaluation had actually been conducted.

Funding:

Funding varies widely across all the MPOs. Funding levels for MPOs range from $10,800 being budgeted for public participation activities by the Tri-Cities MPO to $471,000 being allocated to public involvement in the National Capital Area. Incidentally, Tri-Cities also budgeted a lower percentage of its funds for public participation than any other MPO in the study. The Fredericksburg MPO budgeted the highest percentage of its budget to public participation. The three largest MPOs in Virginia budgeted the highest amount of funds for public participation activities, but this amount only represented 3.4% to 4% of their budget, compared to the average amount budgeted for all MPOs in this study, 6.22 %.

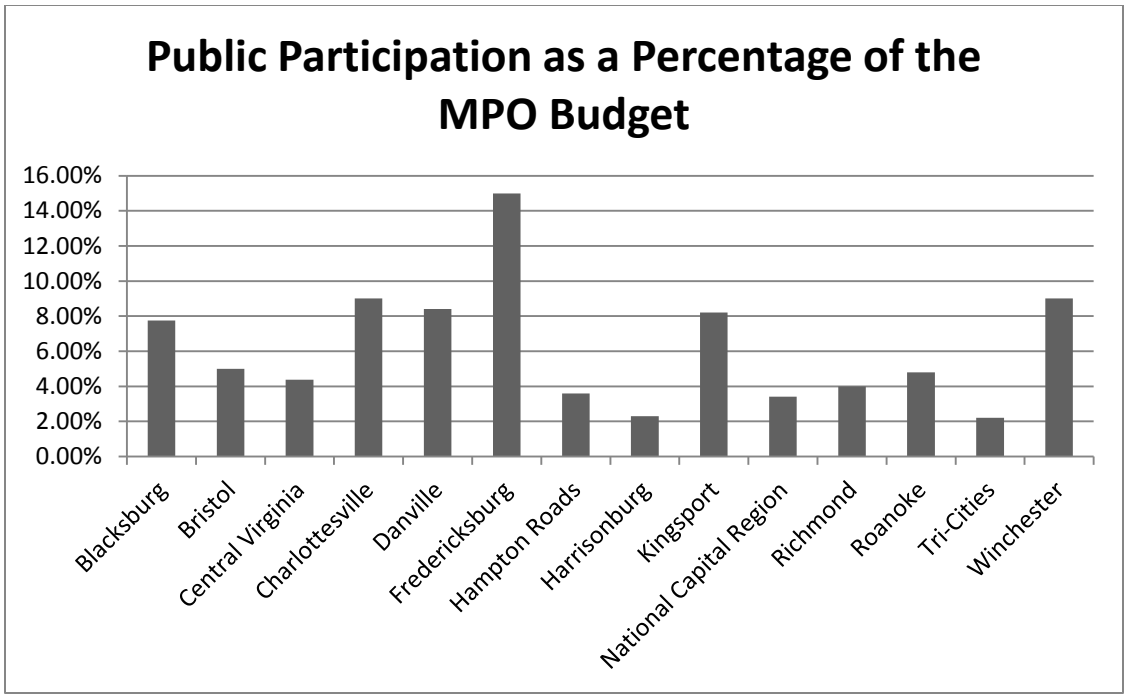


Figure 5: Funding Levels for Public Participation

In many cases public participation was not listed as a separate item or task in the Unified Planning Work Program (UPWP), which serves as the annual budget plan for an MPO. Seven MPOs listed public participation as a line item in the UPWP and six included it as a part of other tasks, usually either program administration or long range plan (same as the MTP) development. While some MPOs like Hampton Roads, Fredericksburg, and the National Capital Region have dedicated staff for public participation activities, this was not true in most cases.

Early and Continuous Participation:

It was encouraging to find that nearly 79% of MPOs in Virginia conducted early and continuous public participation in the development of the MTP. Transportation agencies have a reputation for doing the bare minimum for public involvement and only seeking public input after alternatives have been developed.

Table 13: Findings for "Early and Continuous Participation"

	Public Input was Gathered at the Following Stages of Plan Development:				Early and Continuous Participation?
MPO	**(1) Initiation**	**(2) Alternatives Development**	**(3) Draft Plan**	**(4) Final Plan**	
1. Blacksburg	No	Yes	Yes	Yes	Yes
2. Bristol	No	No	Yes	Yes	No
3. Central Virginia	Yes	Yes	Yes	Yes	Yes
4. Charlottesville	Yes	Yes	Yes	Yes	Yes
5. Danville	Yes	Yes	Yes	Yes	Yes
6. Fredericksburg	No	No	Yes	Yes	No
7. Hampton Roads	Yes	Yes	Yes	Yes	Yes
8. Harrisonburg	No	No	Yes	Yes	No
9. Kingsport	No	Yes	Yes	Yes	Yes
10. National Capital Region	No	Yes	Yes	Yes	Yes
11. Richmond	Yes	Yes	Yes	Yes	Yes
12. Roanoke Valley	Yes	No	Yes	Yes	Yes
13. Tri-Cities	No	Yes	Yes	Yes	Yes
14. Winchester-Frederick	Yes	No	Yes	Yes	Yes

Every MPO collected public input on the draft and final plan. This is not surprising since it is spelled out in federal regulations that input be gathered on the draft plan. Input on the final plan usually came in the form of a public hearing or comment period at the meeting of the MPO Policy Board during which the plan was adopted.

In cases such as Roanoke Valley and Hampton Roads, early participation was the result of on-going activities that gathered input continuously and in advance of initiating the MTP. For both of these MPOs, the results of public kiosks were used as initial input into the plan at the outset of the process. Public information meetings or workshops were used by 50% of the MPOs

to gather input when the plan was initiated or during the development of alternatives. Citizen advisory committees, focus groups and surveys were also commonly used.

Complete Information:

While everyone uses the transportation network, transportation planning and engineering concepts can sometimes be difficult to understand to the lay person. Additionally, engineering disciplines generally make decisions based on technical analyses and models that are not easily communicated to the masses without the aid of visualization tools. For this reason, it is important that complete information be provided to the public to increase the general population's understanding of the transportation planning process and decisions that are made in that process. In most cases, 71%, the MPOs provided complete information to the public.

Table 14: Findings for "Provided Complete Information"

	Complete Information was provided through:			Provided Complete Information?
MPO	**(1) Availability of Tech. Info**	**(2) Visualization**	**(3) Verbal Explanation of Tech. Info.**	
1. Blacksburg	Yes	Yes	Yes	Yes
2. Bristol	No	Yes	Yes	No
3. Central Virginia	Yes	Yes	Yes	Yes
4. Charlottesville	Yes	Yes	Yes	Yes
5. Danville	Yes	Yes	Yes	Yes
6. Fredericksburg	Yes	Yes	Yes	Yes
7. Hampton Roads	Yes	Yes	Yes	Yes
8. Harrisonburg	Yes	Yes	No	No
9. Kingsport	Yes	Yes	Yes	Yes
10. National Capital Region	Yes	Yes	Yes	Yes
11. Richmond	Yes	Yes	Yes	Yes
12. Roanoke Valley	No	Yes	Yes	No
13. Tri-Cities	Yes	Yes	No	No
14. Winchester-Frederick	Yes	Yes	Yes	Yes

The use of internet websites has greatly improved transparency of many government agencies and allowed the MPOs to share large amounts of technical data about transportation planning processes. Also, the wide provision of information in general has led to a more informed public. Presentations were a common tool for sharing information. In many cases, presentations that were given to MPO Policy Boards were also shared at public information meetings, workshops, with community groups, and/or posted to MPO websites. Maps were used by every MPO both in the MTP and in presentations or displays at public meetings and workshops. The Charlottesville and Hampton Roads MPOs took mapping one step further and developed an interactive tool that allowed the public to input an address and see which projects from the MTP were in close proximity to that address.

Broad Outreach:

Just over half of the MPOs met at least three of the four criteria for accomplishing broad outreach. Criteria for broad outreach included 1) using six or more techniques to solicit and gather input; 2) conducting independent outreach to low-income and minority communities; 3) geographically diversifying outreach; and 4) using multiple languages to solicit or provide information. Of the fourteen MPOs, eleven used six or more techniques and twelve had independent outreach to low-income and minority communities. Half of the MPOs had geographically diverse participation, meaning they went out into the community to gather input rather than holding meetings and requiring the public to come to them. Only six of the MPOs provided and/or solicited information in multiple languages, usually Spanish.

Table 15: Findings for "Broad Outreach"

MPO	Public Participation Included Broad Outreach through the use of : (1) 6 or More Techniques	(2) Outreach to Low Income and Minority Populations	(3) Geographic Diversity	(4) Multiple Languages	Broad Outreach?
1. Blacksburg	No	Yes	No	No	No
2. Bristol	Yes	Yes	No	No	No
3. Central Virginia	Yes	Yes	Yes	No	Yes
4. Charlottesville	Yes	Yes	Yes	Yes	Yes
5. Danville	Yes	Yes	No	No	No
6. Fredericksburg	Yes	Yes	Yes	Yes	Yes
7. Hampton Roads	Yes	Yes	Yes	Yes	Yes
8. Harrisonburg	No	Yes	No	Yes	No
9. Kingsport	Yes	No	No	No	No
10. National Capital Region	Yes	Yes	No	Yes	Yes
11. Richmond	Yes	Yes	Yes	Yes	Yes
12. Roanoke Valley	Yes	Yes	Yes	No	Yes
13. Tri-Cities	Yes	No	No	No	No
14. Winchester-Frederick	Yes	Yes	Yes	No	Yes

The National Capital Region uses the Google Translate tool on its website, allowing the public to view the website in over sixty languages, which is understandable given the diversity of the Washington, D.C. region. Outreach to low-income and minority populations is stated as requirement in federal regulations, so it is understandable that 86% of the MPOs meet this criterion. This outreach was usually accomplished through advertisements in traditionally African American and Hispanic newspapers and media markets. In some cases, MPOs held meetings in predominantly minority areas and the Fredericksburg MPO placed fliers in known minority neighborhoods. The National Capital Region and Richmond MPOs actually had

separate citizen advisory committees for underserved populations – the Access for All Committee and the Elderly and Disabled Advisory Committee.

Responsiveness:

The criteria for responsiveness were focused on indicators that the MPO was aware of public sentiment and made an effort to acknowledge it in the development of the MTP. Sufficient information was only available to evaluate thirteen of the MPOs in the study for this characteristic. Of the thirteen MPOs, twelve MPOs included specific comments or results of public input in the body or appendix of the MTP document. Most MPOs had a separate chapter in the document describing the public input process and how it fed into the plan development. Seven MPOs actually provided responses to some of the individual comments received or included a disposition of comments in the MTP. Only five MPOs sought out information on customer satisfaction as a part of public participation activities for the MTP. Overall, 77% of MPOs met two of the three criteria for responsiveness.

Table 16: Findings for "Responsiveness"

MPO	MPOs Were Responsive to Public Input By: (1) Including Public Comments in the MTP	(2) Responding to Comments Received	(3) Assessing Customer Satisfaction	Responsive to Public Input?
1. Blacksburg	Yes	Yes	No	Yes
2. Bristol	No	No	Yes	No
3. Central Virginia	Yes	Yes	No	Yes
4. Charlottesville	Yes	Yes	Yes	Yes
5. Danville	Yes	Yes	No	Yes
6. Fredericksburg	Yes	Yes	Yes	Yes
7. Hampton Roads	Yes	Yes	Yes	Yes
8. Harrisonburg	Yes	No	No	No
9. Kingsport	Yes*	Yes*	N/A	Yes*
10. National Capital Region	Yes	Yes	No	Yes
11. Richmond	Yes	Yes	No	Yes
12. Roanoke Valley	Yes	No	Yes	Yes
13. Tri-Cities	N/A	N/A	No	No
14. Winchester-Frederick	Yes	No	No	No

***A disposition of comments was included in the Kingsport MTP document based on a summary of comments received. Kingsport is not included in the analysis for this characteristic because information for each criterion was not available.**

My first research question asks "What are the characteristics of public participation conducted for transportation planning by Virginia's Metropolitan Planning Organizations?". Half of the MPOs have well defined public participation plans. In the development of the metropolitan transportation plan, most of the MPOs in Virginia employed an early and continuous process, provided complete information to the public, and were responsive to the public. On average, 6.3% of MPO budgets were allocated to public participation during the year the MTP was developed. A summary of these finding are tabulated in Table 17.

Table 17: Characteristics of MPOs

MPO	Well Defined PPP	Funding Amount	Funding Level	Early & Continuous Participa-tion	Complete Information	Broad Out-reach	Respon-siveness
1. Blacks-burg	N	$34,000	7.75%=M	Y	Y	N	Y
2. Bristol	Y	$18,361	5%=L	N	N	N	N
3. Central Virginia	Y	$14,515	4.37%=L	Y	Y	Y	Y
4. Charlottes-ville	N	$37,534	9%=M	Y	Y	Y	Y
5. Danville	N	$31,500	8.4%=M	Y	Y	N	Y
6. Fredericks-burg	Y	$90,000	15%=H	N	Y	Y	Y
7. Hampton Roads	Y	$434,460	3.6%=L	Y	Y	Y	Y
8. Harrison-burg	Y	$8,600	2.3%=L	N	N	N	N
9. Kingsport	N	$60,403	8.2%=M	Y	Y	N	Y
10. National Capital Region	Y	$471,900	3.4%=L	Y	Y	Y	Y
11. Richmond	N	$105,000	4%=L	Y	Y	Y	Y
12. Roanoke Valley	Y	$25,496	4.8%=L	Y	N	Y	Y
13. Tri-Cities	N	$10,800	2.2%=L	Y	N	N	N
14. Win-chester-Frederick	N	$42,771	9%=M	Y	Y	Y	N

Public Input in Metropolitan Transportation Planning

Virginia's MPOs use a variety of techniques to conduct public participation for the transportation planning process. Websites, open public comment periods, public information meetings, and newspaper advertisements were used most frequently. Some MPOs employed uncommon techniques such as newsletters (Hampton Roads), newspaper inserts (Fredericksburg), school outreach programs (Hampton Roads), and utility bill stuffers (Roanoke Valley). Surprisingly, the Hampton Roads MPO is the only one using social media for sharing information. Public hearings, providing hard copies of the document at public centers or libraries, and email or direct mail continue to be common techniques for gathering and soliciting input for transportation planning. Most of the input that was gathered was provided from

surveys, focus groups, public meetings (public information meetings and workshops) and comments submitted through emails or MPO websites. A total of thirty techniques were identified in this study. They are listed in Table 13.

Table 18: Public Participation Techniques Used by MPOs.

Technique	Frequency of Use
1. Cable Access Television	4
2. Citizens Advisory Committee (s)	5
3. Direct mail to citizens and interested parties	6
4. Email to citizens and interested parties (distribution list)	6
5. Fliers	2
6. Focus Groups	3
7. Hard Copy Document Availability for Review	8
8. Kiosk(s)	2
9. Newsletter	1
10. Newspaper Advertisements	12
11. Newspaper Interviews/Articles	2
12. Newspaper Insert	1
13. Open Public Comment Period	11
14. Piggy-back on other events	2
15. Presentations to City Council	2
16. Presentations to Community Groups	2
17. Press releases	5
18. Public comment during MPO meeting	5
19. Public Hearing	6
20. Public Information Meeting	12
21. Public Information Officer Outreach	1
22. Radio advertisements	3
23. School Outreach	1
24. Social Media	1
25. Speakers Bureau	2
26. Survey (web-based or other)	5
27. Utility Bill Stuffers	1
28. Webcast	2
29. Website	13
30. Workshops	3

Public apathy has always been a concern of public participation in transportation planning, particularly with the development of the metropolitan transportation plan. Because the

plan has a twenty-year horizon, it is difficult to garner interest because immediate impacts are not felt. It is likely that community characteristics such as population size, education and income levels are factors. It's not surprising that the most populous MPOs, Hampton Roads, Richmond, and the National Capital Area, received a large quantity of input during the plan development process. Fredericksburg and Roanoke-Valley, recently designated as Transportation Management Areas (TMA) due to population growth with the last census, also received a higher volume of input through the techniques employed. The Charlottesville-Albemarle MPO has a smaller population than others mentioned (113,000), but still garnered a high quantity of input. Smaller metropolitan areas such as Blacksburg, Bristol, Danville, and Winchester-Frederick, were not able to solicit a significant amount of input from the public. Despite the techniques employed, the Tri-Cities MPO was not able to solicit even one comment throughout the plan development process.

The MPOs were scored based on the degree to which the Metropolitan Transportation Plan reflected the input received. This score was calculated based on the following calculation:

Score = (2 x each positive outcome + (1 x each inherent outcome) +
(-2 x each negative outcome)

There were three possible outcomes for the way input was considered in the MTP. If it was found that the input was not reflected in the plan, it was considered a "Negative Outcome". In some cases it was found that the alternatives, recommendations or projects in the MTP were already reflective of the sentiment of public input, therefore yielding an "Inherent Outcome". When evidence existed that project alternatives and program recommendations were generated

as a result of the public participation process and then included in the Plan, it was considered a "Positive Outcome". The results of this scoring are captured in Table 19.

Table 19: "The Degree to Which Metropolitan Transportation Plans Reflect Public Input"

MPO	Positive Outcome (+2 points)	Inherent Outcome (+1 point)	Negative Outcome (-2 Points)	Score	MTP Reflective of Input
Charlottesville	40	11.00	-10.00	41.00	More Reflective
Central Virginia	34	4.00	-6.00	32.00	More Reflective
Hampton Roads	24	13.00	-10.00	27.00	More Reflective
Roanoke Valley	10	11.00	0.00	21.00	More Reflective
Fredericksburg	4	8.00	0.00	12.00	More Reflective
Richmond	6	21.00	-20.00	7.00	More Reflective
Blacksburg	2	0.00	0.00	2.00	Less Reflective
Bristol	0	8.00	-6.00	2.00	Less Reflective
Danville	0	5.00	-4.00	1.00	Less Reflective
National Capital Region	0	6.00	-6.00	0.00	Less Reflective
Winchester-Frederick	0	2.00	-6.00	-4.00	Less Reflective
Harrisonburg-Rockingham	0	0.00	-8.00	-8.00	Less Reflective
Tri-Cities	*No input was received from the Public*			0.00	Less Reflective

The second research question asked "Are Metropolitan Transportation Plans reflective of the public input received?". About half of the MPOs have plans that are more reflective of public input and half have plans that reflect public input to a lesser extent. The Charlottesville, Central Virginia (Lynchburg), Hampton Roads, and Roanoke-Valley Area MPOs scored above twenty points, demonstrating that their plans are highly reflective of the input they received. That is less true for MPOs in the National Capital Region (Washington, DC), Winchester-Frederick, Harrisonburg-Rockingham, and Tri-Cities which all had scores of zero or negative scores.

Linking Characteristics of Participation to Public Input

The third research question asks "Is there a relationship between the characteristics of public participation and the degree to which Metropolitan Transportation Plans reflect public input?" A cross tabulation analysis was done to determine if there is any indication that the characteristics of public input (well-defined participation plans, funding, early and continuous participation, the provision of complete information, broad outreach and responsiveness) are related to the degree to which metropolitan transportation plans reflect public input.

There is not a discernible pattern between well-defined participation plans and a reflection of public input in the metropolitan transportation plan. This is not surprising given that the MPOs were equally divided between those that have well defined participation plans and those that don't. Add to the equation the fact that they are equally divided regarding the degree to which their MTPs are reflective of public input. As mentioned previously, most MPOs have developed Public Participation Plans that are procedural documents and have not really given much thought to the performance or effectiveness of the public participation program. That being the case, it is reasonable that the design of the participation plan is not clearly linked to outcomes of public participation.

Table 20: Well Defined Plan Cross Tabulation

		Was the MTP more or less reflective of public input?		
		More Reflective	Less Reflective	Total
Was the plan well-defined?	Yes	4	3	7
	No	2	4	6

There is not an obvious relationship between the level of funding and the degree to which the MTP reflects public input. While the Fredericksburg MPO which did budget the highest percentage of its funding to public participation (compared to the other MPOs) was found to have an MTP that was more reflective of public input, there is no discernible pattern between the remaining MPOs.

Table 21: Level of Funding Cross Tabulation

		Was the MTP more or less reflective of public input?		
		More Reflective	Less Reflective	Total
What was the level of funding for public participation?	High	1	0	1
	Medium	1	3	4
	Low	4	4	8

Regarding early and continuous participation, again, there is not an obvious relationship between the two variables. Of those MPOs that were found to have early and continuous input, they were split evenly between their MTPs being more or less reflective of public input.

Table 22: Early and Continuous Participation Cross Tabulation

		Was the MTP more or less reflective of public input?		
		More Reflective	Less Reflective	Total
Was participation early and continuous?	Yes	5	5	10
	No	1	2	3

In comparing how MPOs did in providing complete information to the public to the degree to which MTPs reflected public input, the results are not indicative of a relationship between the two variables. Of those that did provide complete information, the results are almost evenly split regarding the degree to which the plans reflected public input.

Table 23: Complete Information Cross Tabulation

		Was the MTP more or less reflective of public input?		
		More Reflective	Less Reflective	Total
Was "complete information" provided to the public?	Yes	5	4	9
	No	1	3	4

The findings strongly support the notion that public participation that has broad outreach is linked to the degree to which an MPO's plan is reflective of public input. Those MPOs that conducted broad outreach in the development of their MTPs were found to have MTPs that are more reflective of public input, with one exception, the National Capital Region. The MPOs that didn't conduct broad outreach exclusively had MTPs that were less reflective of public input. Broad outreach is in some ways related to equity, meaning that efforts are made to provide equitable access for all to the transportation decision making process (Kramer et al., 2008). The criteria established in this study not only account for minimum requirements like outreach to low income and minority populations, but also for the use of out of the box participation techniques and seeking input by going to the public rather than expecting the public to come to the MPO. MPOs that proactively broaden the span of their participation efforts are likely to incorporate the results of those efforts into transportation decisions.

Table 24: Broad Outreach Cross Tabulation

		Was the MTP more or less reflective of public input?		
		More Reflective	Less Reflective	Total
Was there broad outreach to the public?	Yes	6	1	7
	No	0	6	6

The final characteristic that was considered was responsiveness to the public. Though all the MPOs that were found to have plans that were more reflective of public input were also found to be responsive to the public, there is not enough of a pattern to link the two variables in this cross tabulation. While there appears to be some support for the notion that responsiveness leads to plans that are reflective of public input, nearly half of the MPOs with less reflective plans were also responsive to the public, leaving this result inconclusive. There are not federal requirements linked to the criteria used in this study to determine if an MPO is responsive to the public. Responsiveness is an indicator that the MPO is carefully considering public input in transportation decisions (Kramer et al., 2008).

Table 25: Responsiveness Cross Tabulation

		Was the MTP more or less reflective of public input?		
		More Reflective	Less Reflective	Total
Was the MPO responsive to the public?	Yes	6	3	9
	No	0	4	4

Overall, it appears that only one of the characteristics of public participation programs is tied to outcomes that produce a Metropolitan Transportation Plan that is more reflective of public input, that being broad outreach.

Levels of Engagement and Public Input

One of the primary purposes of this study was to find out how much the MPOs in Virginia engaged the public in the transportation planning process and how that engagement affected outcomes of the process. Of the thirteen MPOs that were studied, four (Central Virginia (Lynchburg), Charlottesville-Albemarle, Hampton Roads, and Richmond) were found to "Collaborate" with the public, achieving a medium-high level of engagement. Both the Roanoke Valley Area and Fredericksburg MPOs "Involved" the public, achieving a medium level of engagement. The remaining MPOs were found to "Consult" the public, only achieving medium-low level of engagement. While many techniques were employed by the MPOs to conduct public participation, over half of the MPOs only used participation techniques that either informed the public or solicited comments from the public, not taking the extra step to involve the public more directly in the transportation decision making process. None of the MPOs achieved the highest level of engagement, empowering the public and placing the final decision in the public's hands.

The fourth research question asks "Is there a relationship between the level of engagement of public participation and the degree to which Metropolitan Transportation Plans reflect public input?" The results of the cross tabulation very clearly indicate that there is a link between higher levels of engagement and MTPs that are more reflective of public input. All MPOs that achieved a medium to medium-high level of engagement were found to have MTPs

that are more reflective of input. Those MPOs that reached a medium-low level of input had less reflective MTPs.

Table 26: Level of Engagement Cross Tabulation

		Was the MTP more or less reflective of public input?		
		More Reflective	Less Reflective	Total
What was the level of engagement achieved?	Collaborative (medium-high)	4	0	4
	Involving (medium)	2	0	2
	Consulting (medium-low)	0	7	7

Deliberation and Public Input

In order for an MPO's participation activities to be consider to be inclusive of deliberation, four criteria had to be met: 1) Information related to the MTP was provided to citizens; 2) Citizens were provided the opportunity to review, discuss and debate the information; 3) Citizens were provided an opportunity to reach an agreed upon decision either with MPO staff, decision makers or among themselves; and 4) MPO Staff or Board received individual or collective feedback or a recommendation that is reflective of the outcome of the deliberation process. Six of the MPOs in this study met all four criteria for deliberation. Deliberation was associated with citizen advisory committees, working with citizen and community groups, and workshops. Though focus groups are not considered a deliberative technique, the manner in which the Central Virginia (Lynchburg) MPO conducted its focus groups resembled that of a deliberative workshop.

The final research question asks "Does deliberation result in Metropolitan Transportation Plans that are more reflective of public input?" The contingency table for this cross tabulation shows a strong pattern in favor of a positive relationship between the use of deliberation and MTPs that are more reflective of public input.

Table 27: Deliberation Cross Tabulation

		Was the MTP more or less reflective of public input?		
		More Reflective	**Less Reflective**	**Total**
Did the MPO use deliberation?	Yes	6	0	6
	No	0	7	7

Hypotheses

This study tested three hypotheses and six sub-hypotheses. As mentioned previously, research questions one and two are exploratory and served to provide the basis for answering research questions three, four, and five. Hypothesis 1 and its sub hypotheses are tied to research question three: *Is there a relationship between the characteristics of public participation and the degree to which Metropolitan Transportation Plans reflect public input?* Hypothesis 2 is tied to research question four: *Is there a relationship between the level of engagement of public participation and the degree to which Metropolitan Transportation Plans reflect public input?* Finally, hypothesis 3 is tied to research question five: *Does deliberation result in Metropolitan Transportation Plans that are more reflective of public input?* The results for testing the hypotheses are listed in the table below:

Table 28: Tested Hypotheses

	Hypotheses	Result
Hypothesis 1	The degree to which Metropolitan Transportation Plans reflect public input is dependent upon the characteristics of the public participation.	Not supported
Sub-Hypothesis 1.1	Metropolitan Transportation Plans are more reflective of public input when the Public Participation Plan is well defined.	Not supported
Sub-Hypothesis 1.2	Metropolitan Transportation Plans are more reflective of public input when more funding is provided for public participation activities.	Not supported
Sub-Hypothesis 1.3	Metropolitan Transportation Plans are more reflective of public input when public participation activities are conducted early and continuously throughout the planning process.	Not supported
Sub-Hypothesis 1.4	Metropolitan Transportation Plans are more reflective of public input when complete information is provided to the public	Not supported
Sub-Hypothesis 1.5	Metropolitan Transportation Plans are more reflective of public input when public participation activities have broad outreach.	Supported
Sub-Hypothesis 1.6	Metropolitan Transportation Plans are more reflective of public input when planning staff is responsive to feedback collected during public participation activities.	Not Supported
Hypothesis 2	Metropolitan Transportation Plans are more reflective of public input when there is a higher level of engagement.	Supported
Hypothesis 3	Metropolitan Transportation Plans are more reflective of public input when public participation includes deliberation.	Supported

Although I did find overall evidence supporting literature based in levels of engagement and the use of deliberation, with the exception of broad outreach, my hypotheses concerning the characteristics of public participation programs are not supported. The hypotheses based on levels of public engagement and the use of deliberation (higher levels of engagement and the use of deliberative methods result in public policy that is more reflective of public input) are supported whereas the hypotheses based on the characteristics of public participation are contrary to what we may expect from existing literature.

The findings in this study that are contrary to the literature indicating the importance of public participation program design in influencing outcomes indicate that researchers studying public participation may not be able to rely on existing literature and program guidance on how public input influences program decisions based on program characteristics. In gathering public input, MPOs used different public participation techniques at different points in the plan development process. Those MPOs that were found to have broad outreach had transportation plans that were reflective of public input to a greater extent. This suggests that despite aspects such as the design of public participation plan, funding, timeliness (early and continuous), the provision of complete information, and responsiveness, transportation decisions reflect public input more often when MPOs use a wide range of approaches to reach the public and are responsive to the input gathered. Additionally, broad outreach demonstrates a more intentional effort to reach a variety of people and seek their input into the process. Perhaps the amount of funding budgeted for public participation doesn't affect outcomes as much as the time and effort that go into seeking out public input. It is also important to note that while there are federal regulatory requirements tied to characteristics such as the public participation plan, gathering input at certain points in the planning process (i.e. early and continuous participation) and making information available to the public and using visualization techniques, (i.e. complete information), the hypotheses related to these characteristics were not supported. On the other hand, the hypothesis linked to the characteristic that was supported is not specifically tied to federal regulations, with the exception of outreach to underserved populations (i.e. low income and minority population). It could be that regulatory requirements result in procedural and perfunctory approaches by MPOs to public involvement and not proactive, earnest attempts to gather public input for consideration in the decision making process.

It should also be considered that because of the limitations of this study, perhaps enough data were not available to test the identified hypotheses. As mentioned in Chapter 3, this study was conducted among a small population and is only based on available secondary data sources. Perhaps the lack of primary data sources, and other study limitations did not provide the data needed to appropriately define the characteristics of public participation. Further research to explore these findings in detail would be beneficial to policy and practice.

Summary

By studying the metropolitan regions of Virginia, this study sought to determine which characteristics are present in successful public participation programs and what aspects of public participation lead to transportation decisions that are reflective of public input. The findings of this study have clearly shown that broad outreach, higher levels of engagement and deliberation have a positive relationship with transportation plans that are more reflective of public input. To a lesser extent, responsiveness is also linked to plans that reflect public input more.

CHAPTER 5: CONCLUSIONS

It is not merely the absence or presence of the public in the decision making process that affects how transportation planning decisions are made, but rather *how* the public is engaged that is important. This study examines public participation in transportation planning and how the characteristics of participation programs, the level of engagement, and deliberation affect transportation planning decisions in metropolitan areas, particularly, the development of the Metropolitan Transportation Plan (MTP). By exploring these facets of participation in Virginia's fourteen Metropolitan Planning Organizations (MPOs), efforts were made to identify the aspects of the public participation that lead to the implementation of input provided by the public. This chapter summarizes the study and its findings and presents conclusions and proposes recommendations. It also discusses implications for policy and public administration and considerations for further research.

Summary of the Study

The purpose of this study is to examine public participation in transportation planning with specific focus on how the characteristics of public participation, the level of engagement and deliberation affect the extent to which transportation planning decisions are reflective of public input received. It has been a longstanding difficulty to engage the public in the long range planning process. The planning horizon for the metropolitan transportation plan is twenty years and many individuals don't consider the decisions made regarding the plan to have an imminent effect on daily life. Laws requiring public involvement are intentionally vague and don't prescribe specific approaches, leading many state, regional and local transportation agencies to

do only what is necessary to meet minimum requirements (PBS&J, 2009). By only seeking to meet minimum requirements, public participation in transportation planning in many cases ends up being an obligatory duty with no meaningful outcomes. This is less acceptable in the age of government transparency, a 24 hour news cycle and a public that has access to a wide range of information. There is a prevailing view that practices that have traditionally been used for public participation are no longer appropriate for a more informed and less deferential public (Inglehart, 1995; O'Hara, 1998). There is a need to identify public participation practices that are most effective for gathering valuable public input for long range transportation planning. To accomplish this, this study was conducted among Virginia's fourteen MPOs. Five research questions are asked:

1. What are the characteristics of public participation conducted for transportation planning by Virginia's Metropolitan Planning Organizations?
2. Are Metropolitan Transportation Plans reflective of the public input received?
3. Is there a relationship between the characteristics of public participation and the degree to which Metropolitan Transportation Plans reflect public input?
4. Is there a relationship between the level of engagement of public participation and the degree to which Metropolitan Transportation Plans reflect public input?
5. Does deliberation result in Metropolitan Transportation Plans that are more reflective of public input?

The review of the literature focused on public participation design and effectiveness, levels of engagement, and deliberative democracy. Existing literature on public participation finds that the relationship between citizen participation and organizational decisions is often

intermediated by the design of the participation program or the means by which citizens are engaged (Ebdon & Franklin, 2006; Rowe & Frewer, 2004). Regarding levels of engagement, the literature indicated that when citizens experience a higher level of participation in public policy decisions, policy outcomes are usually reflective of the input provided (Arnstein, 1969; Connor, 1986; Dorcey & Economy, 1994; Rowe & Frewer, 2004). Deliberative approaches to citizen involvement were found to provide a high level of public engagement in policy decisions, a more informed citizenry, and aided in building consensus (Connor, 1986; Spano, 2001). The findings of the literature review lead to the development of hypotheses that suggested that there is a positive relationship between the characteristics of public participation, the level of engagement, and deliberation, and the degree to which metropolitan transportation plans reflect public input.

A quantitatively driven mixed methods study was completed in three phases using secondary data exclusively. Phase I included a review of each MPO and a study of the public involvement procedures that were used to develop each MPO's Metropolitan Transportation Plan. A deductive content analysis of the Metropolitan Transportation Plan, the Public Participation Plan, and the Unified Planning Work Program was completed. Using the data gathered in Phase I, a profile of each MPO was developed that provided metadata for analyzing six characteristics of public participation. They are: (a) a well-defined public participation plan; (b) funding levels; (c) early and continuous participation; (d) the provision of complete information; (e) broad outreach; and (f) responsiveness. Phase I also incorporated the identification and review of the participation techniques employed by each MPO and the level of engagement that was accomplished using each technique. Deliberation was also identified if employed. Phase II of the study focused on the input that was gathered by each MPO for public participation activities conducted during the development of the MTP. The raw and summary

data collected during public participation activities was inductively analyzed to identify emerging themes, goals, and projects to gain a sense of the public's behest. This information was used to generate a compressed list of public comments that was compared to the content of the MTP to determine if public input was reflected in the plan. Based on the amount of public input and the results of the comparative analysis of the MTP, each MPO was given a score that reflected the degree to which public input was reflected in the MTP. Higher scores indicated that the plan was more reflective of input and lower scores indicated that the plan was less reflective of public input. In Phase III, the results of Phases I and II were used to conduct across tabulation analysis to determine if there was a relationship between the characteristics of public participation, the level of engagement of participation, and the use of deliberation and the degree to which public input was reflected in the MTP.

Findings

Because the study was conducted in three phases, the findings are three-fold. They relate to the characteristics of public participation, public input gathered through public participation and the relationship between the two.

The first set of findings provides valuable information about Virginia's MPOs and the way public participation is approached.

<u>Regarding the Characteristics of MPOs:</u>

- Half of the MPOs in the study were found to have well defined public participation plans. However, most of MPOs developed the public participation plan as a procedural document rather than a blueprint for how to conduct effective participation. While a few of the MPOs have followed the model of listing specific goals, objectives, and strategies,

most took the approach of listing step by step procedures implementing public involvement. Few examples were found in which desired outcomes were clearly identified. Of those MPOs that included provisions for evaluating public participation, there were very few indications that the evaluation had actually been conducted.

- The funding level of public participation activities ranged from 2.2% to 15% of the MPOs' annual budgets. On a scale where 5% or less was considered low and greater than 10% was considered high, most of Virginia's MPOs (57%) fell into the low range for budgeting for public participation activities.
- Most of the MPOs conducted early and/or continuous public participation. Public kiosks, citizen advisory committees, focus groups and surveys were effective ways of gathering input early in the plan development process. Public information meetings or workshops were used by 50% of the MPOs to gather input when the plan was initiated or during the development of alternatives.
- Most of the MPOs made technical information available to the public and visualized and explained the information to enhance the layperson's understanding. Of the 71% of MPOs that provided complete information to the public, most used mapping, presentations, and websites to share information. Visualization tools and mapping exercises were used most often to guide citizens through the transportation decision making process.
- While some of the MPOs in Virginia realize the importance of broad outreach, it is still a shortcoming in almost half of the MPOs in the Commonwealth. Just over half, 57%, of the MPOs met at least three of the four criteria for accomplishing broad outreach. While most used multiple techniques to reach the public and conducted independent outreach to

low-income and minority communities, only about half were geographically diverse in their outreach or provided and/or solicited information in multiple languages.

- Most of the MPOs are responsive to public input. Overall, 77% of MPOs met two of the three criteria for responsiveness. Responsiveness is primarily about the MPO being aware of the public's feelings and making an effort to acknowledge those feelings in the development of the MTP. Responsiveness was demonstrated by including a chapter in the MTP on the public involvement process, documenting and capturing public input in official documents, and acknowledging public comments in a direct response or a disposition of public comments. Only five MPOs sought out information on customer satisfaction as a part of public participation activities for the MTP.

The second set of findings provides insight into the input that was gathered and how it was used.

<u>Regarding Public Input:</u>

- Virginia's MPOs used over thirty participation techniques to gather input from the public. Most of the input that was gathered was provided from surveys, focus groups, public meetings (public information meetings and workshops) and comments submitted through emails or MPO websites.
- Traditional public participation techniques such as public hearings, providing hard copies of the document at public centers or libraries, and email or direct mail continue to be common techniques for gathering and soliciting input for transportation planning.
- Largely populated metropolitan regions such as Hampton Roads, Richmond, and the National Capital Area received a large quantity of input during the plan development process. Fredericksburg, Roanoke-Valley, and the Charlottesville-Albemarle MPO also

garnered high numbers of participants in the public involvement process. Smaller metropolitan areas such as Blacksburg, Bristol, Danville, and Winchester-Frederick, were not able to solicit a significant amount of input from the public. The Tri-Cities MPO was not able to solicit even one comment throughout the plan development process.

- The Charlottesville-Albemarle, Central Virginia (Lynchburg), Hampton Roads, and Roanoke Valley Area MPOs scored the highest (above 20) on the degree to which the MPT reflects public input. There are some similarities among the approaches taken by these MPOs. All four of these MPOs had early and continuous participation, broad outreach, and were responsive to public participation. These MPOs also had higher levels of participation and used deliberation as a part of their participation process. Workshops, focus groups, and citizen advisory committees were techniques used by most of these four MPOs.
- Techniques that are connected with the highest level of engagement achieved include: 1) citizen membership on plan development advisory committees; 2) citizen advisory committees; 3) public information meetings (used to guide project selection and/or project prioritization); 4) surveys (used during the alternatives development stage to prioritize projects); and 5) workshops.

The third and final set of findings answer the question of how the characteristics of public participation, the level of engagement of public participation and deliberation affect the degree to which public input is reflected in the MTP.

- Findings are inconclusive regarding the relationship between the characteristics of public participation and the degree to which the MTP reflects public input.

- Though most of the individual characteristics did not reveal a discernible relationship to the dependent variable, results of the cross tabulation indicated a positive relationship between broad outreach and the degree to which public input was reflected in the MTP.
- When the level of engagement is higher, the MTP is more reflective of public input.
- When deliberation is used, the MTP is more reflective of public input.

In general, the findings from this research support existing public participation literature related to level of engagement and the use of deliberation. In public participation literature scholars assert that simply soliciting public input in public policy activities does not yield an automatic difference in agency decisions. Instead, the findings confirm what public participation scholars already know, that there are particular conditions and factors necessary in order for public input to make a difference in public policy decisions.

Recommendations

It has been assumed that simply involving the public in transportation programs and projects would be enough and somehow lead to transportation decisions that are widely supported. What I find instead is a much more complex story of citizen involvement in transportation planning. While there is general agreement about the importance of public participation in transportation decision making processes (Bickerstaff & Walker, 2001; Burby, 2003; Schively et al., 2007), practitioners remain in search of guidance on how to conduct participation that is effective and efficient. Studying the entire population of MPOs in Virginia offers insights into how MPOs approach public involvement, gather input from the public, and use that input in the decision making process.

While successful public involvement has not been defined in this study, it is safe to say that to some extent it means gathering valuable information from the public that is useful in the decision making process. This study supports the notion that the key to getting to "valuable" input is through employing a wide range of approaches to gather public input during the transportation planning process. Furthermore, the finding that most public participation plans are procedural in nature and not based on outcomes is an indication that the design of public participation plans is an issue of concern. Based on the findings of this dissertation, I submit the following recommendations:

MPOs and transportation agencies should develop participation plans based on desired outcomes. Rather than focus on the procedures of conducting public involvement, transportation professionals should consider how the public can enhance the planning or project development process. When participation is conducted as a procedural step in the process rather than an outcome driven effort, the results are less valuable to the agency and the public.

Targets, performance measures and an evaluation process should be a part of any public participation effort. Without targets for performance and a mechanism for evaluating a public participation process, it is difficult to measure success. Realistic targets or goals let the practitioner know the aim of the participation effort, thereby improving chances of positive outcomes. A frequently used maxim attributed to Peter Drucker states "what gets measured gets done".

Lack of funding should not be a deterrent from pursuing broad and innovative participation. Findings indicate that the level of funding had no relationship to the positive outcomes of participation efforts. Furthermore, the MPOs that scored the highest on "'the degree to which the MTP reflects public input" were all found to have low or medium levels of funding. Actual budgeted amounts for public participation ranged from $14,515 to $434,460, with three of the four highest scoring MPOs budgeting less than $40,000 for carrying out participation activities.

Clearly define the role the public will play in the decision making process. Transportation planning is a technically based discipline and there are some decisions that must be made by professionals. However, as stewards of public dollars, public input must be considered in decisions. At the outset of the planning or project development process, consider how the public can enhance the process and focus on soliciting public input when and where it makes sense.

"Go to the Mountain". There is a phrase in the *Essays* of Francis Bacon, published in 1625 that states, "If the mountain won't come to Muhammad then Muhammad must go to the mountain." In an age when people seek convenience and are accustomed to having access to the world at their fingertips, it is likely that the trend of low attendance at public meetings will continue. Geographically diversifying public input by going to community groups and piggybacking on community events is a good alternative to traditional means of public involvement.

Use demographic profiles to gain a better understanding of who the "public" is and how to reach them. The transportation field is dominated by highly educated, older, white, male professionals while the users of the transportation system are becoming more diverse. The transportation infrastructure that is planned today will be in place for many generations to come. It is important to understand who the users are and what they value in order to plan a system that will work for future generations.

Go beyond soliciting comments and find ways to involve the public in setting goals, developing alternatives, and making decisions. MPOs that were most effective at including public input in the MTP had higher levels of engagement. When citizens experience a higher level of participation, policy outcomes tend to echo public feedback. Workshops, focus groups, and citizen advisory committees were techniques that were found to be useful in elevating the level of citizen engagement.

Involve the public at project initiation and during the development of alternatives. Though the hypothesis for early and continuous participation was not supported, it was found that MPOs that gathered input early in the process achieved higher levels of engagement because they were able to incorporate that input into goals and early alternatives for the plan. With one exception, all MPOs that scored the highest on including public input in the plan had an early and continuous participation process. Particularly, these MPOs were successful at using public input to set the agenda and identify goals for the MTP. This can only be accomplished early in the process. When

input is solicited after a draft plan has been developed, it is difficult to incorporate new concepts proposed by the public.

Find ways to incorporate deliberative techniques into the public participation process. Deliberation facilitates the provision of a higher level of information on policy issues when compared to other types of techniques. This provision of information and the act of deliberating contributes to consensus building. Deliberative techniques were found to result in a higher level of public input in decisions.

These recommendations are based on the findings of this dissertation and observations as transportation professional. In simple terms, public participation does not have to be a difficult process if it is approached in a thoughtful manner. Public input involves effectively informing the public of your desire to get their input and then making it easy for them participate in the process.

Implications for Policy and Practice

Transportation is an issue in which all citizens have stakes because the transportation system and the services it provides impacts every aspect of American life (Stein & Sloane, 2003). In a time of limited resources, increasing public concern over the investment of tax dollars in the country's infrastructure, and a dwindling transportation trust fund and sustainable funding sources, it is important to gain public support and trust in decisions made regarding transportation investments. Effective public involvement provides opportunities to provide decision makers with information about local and individual transportation needs (Stein &

Sloane, 2003; Wilson, 1994). Engaging the public as an ally can result in developing a deeper conversation and gaining more practical insights into diverse issues and concerns than if all parties acted alone and at odds with each other (PBS&J, 2009).

In the age of increased transparency and open government, public participation is key to successful public policy. Since the passage of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), there has been a federally mandated emphasis on early, proactive, and sustained citizen input into transportation decision making—with special outreach efforts targeted at traditionally underserved populations (O'Connor et al., 2000). These requirements have increased with the passage of each transportation act, with an emphasis on identifying specific requirements but not specifying how those requirements should be met. Current federal requirements for transportation planning include the requirement for public participation plans, outreach to underserved populations, ensuring public input on the draft version of major documents, employing the use of visualization techniques and sharing information electronically via the World Wide Web. Despite added regulations, progression in the effectiveness of public participation has remained stationary. I believe that this is primarily because thus far, regulations have focused on process and not performance.

On July 6, 2012 the Moving Ahead for Progress in the 21st Century Act (MAP-21) was signed into law. A step in the right direction, this law shifts program management from a process oriented emphasis to a performance management model, establishing national goals and performance standards and measures. The law requires the establishment of transparent, accountable decision-making frameworks for states and MPOs. Though the law does not contain major changes for the transportation planning process and regulations have not yet been promulgated, it is hopeful that this shift to a performance based approach will lead to public

participation practices that are outcome-based. Federal regulations should focus less on procedural requirements for gathering public input and should focus more on guiding transportation agencies on setting goals and establishing performance measures for public involvement.

The concepts of Open Government and effective public participation go hand in hand. On the federal level, strides have been made to provide the public with access to technical and administrative information to enable greater access to policy decision making processes. While this is true for all federal agencies, the efforts made by the U.S. Department of Transportation indicate increased transparency in normative processes in financial, technical, and administrative arenas. The rulemaking process for MAP-21 is underway and is decidedly "open", employing multiple strategies to get input from the public and stakeholders in the process.

Public involvement continues to be a requirement in laws at the federal, state, and local levels. However, many of the requirements that currently exist are based on public participation practices of previous decades, not taking into consideration the technological advancements that are exponential in nature. Consideration should be given to the information age and the needs of an information dependent citizenry.

Policy implications of the concepts considered in this study are ever prevalent. The provision of information and the need for public input at key points in the decision making process are important to consider. Though the hypotheses regarding early and continuous participation and complete information were not supported, there is still merit to making an effort to accomplish such ideals because they make the public participation process more accessible.

The ideals related to broad outreach such as targeting low income and minority populations, the traditionally underserved and limited English proficiency populations remain important policy issues as our population grows older and more diverse. It is important that policies include safeguards for those most vulnerable.

Finally, there is citizen participation as an exercise in democracy. While the constitution does not specifically mention citizen participation it is certainly implied that people have the right and some would say the duty to participate in the democratic process. Participating in citizen participation activities is one of the simplest ways to impact democracy.

Of significance are the influences that the results of this study have on practical applications in the area of public involvement for transportation planning organizations. Being that the study was performed among MPOs in the Commonwealth of Virginia, its results can be used by federal, state, and regional agencies to improve public involvement programs and activities.

As mentioned previously, consideration should be given to the manner by which public participation is conducted. Following the process can no longer be the goal. We often focus on process when we discuss public involvement, but the key objectives of good public involvement practice revolve around outcomes. Ultimately, the reason to use a decision model that incorporates public involvement is to improve the decisions. In this context, a good decision is one that not only incorporates good planning and engineering practices and results in efficient use of resources, but also best reflects the interests of all stakeholders. Effective citizen participation enhances public administration by providing the community with relevant projects and system improvements. Citizen participation is an effective way to gain knowledge of a

community's needs. Also, program evaluation is key to ensuring that public programs are administered successfully.

Public administration is improved through public participation when there is quality input from the public that can be used to make decisions. One important objective of a good public involvement process is the extent to which the process builds consensus on the path to decision. In exchange for participation in a fair and open process, citizens often are willing to support the outcome of the process even if their preferred alternative is not selected. Deliberative practices are consistent with facilitating this approach to public involvement and are important considerations for practitioners. Public administration is affected by citizen participation because it reduces conflict. Reduced conflict leads to better relations between the government and the public.

Public participation creates a more educated public and a more educated public management. Essential to a good public involvement program is two-way communication that promotes public feedback and uses that feedback to transform the decision process and outcome. A good public involvement process must have as an objective the incorporation of citizen input into the decision process. A "black box" that has public involvement inputs but no clear effect on the outputs is not a successful public involvement program. The decision-making process must be open and clear and should be responsive to citizen input.

Public administrators must also give consideration to how the public can be engaged to a higher extent in public policy decisions. Engagement that not only consults with the public but involves citizens in setting the agenda for public policy can lead to policy outcomes that are vetted and supported.

In a recent conversation with public agency practitioners, I heard someone say, "What the public sector calls public involvement the private sector calls customer service!" There is evidence of a renewed focus on customer service in the public sector and it is incumbent upon public administrators to consider the needs of the customer in the decision making process. Public participation is the means by which that is accomplished and is an important consideration for public administrators on all levels.

Further Research

As was noted in the Introduction, this study provided a unique opportunity to investigate the practice of public participation in transportation planning with specific focus on how the characteristics of public participation, the level of engagement and deliberation affect the extent to which transportation planning decisions are reflective of public input received. From my immersion in this multi-phased, multi-method study, I suggest the following research strategies to address the needs of policymakers and practitioners:

1. **Evaluate the same phenomenon using additional methods such as surveys and interviews to validate results.**

   As noted this study was conducted using secondary data sources. While the use of those data source provided unique opportunities for conducting this study, there are limitations due to the lack of primary data from MPO members and staff. Also, it is difficult to generalize the results of this study to a larger population. By researching similar study questions and concepts and employing additional methods, the findings of this study could be substantiated.

2. **Replicate a similar study using a different population.**

This study was conducted among a population with which the researcher was familiar. This makes objectivity a concern. By repeating the study on a larger scale or in a different state, it will be beneficial to know if similar results will be found. This would help to correct flaws in the research approach and determine if the researcher's knowledge of the study population skewed the results in one direction or another.

3. **Conduct the study using environmental documents for transportation projects.**

This study only considers public input in the transportation planning process, however, public input is a challenge for transportation projects as well. It would be beneficial to conduct a similar study on a large cross section of transportation projects using the environmental document as the level of analysis. This would generate a larger number of subjects and allow the use of additional quantitative analysis methods.

4. **Explore the validity of public comments received during public participation activities and identify public participation methods that generate the most valuable feedback for policy decisions.**

One recurring concern in this study was the validity of the public comments that were reviewed. The literature indicates that an effective public participation involves informing and educating the public so that well informed feedback is provided to the public. This study did not give consideration to the validity of the comments received, but only confirmed that they were reflected in the plan. By further exploring the validity

of public comments, this concern can be address for future studies. Also, it would be beneficial for practice to learn which public participation methods result in valuable public input.

5. **Explore representativeness related to the public input that is received in the administration of transportation programs.**

   While this study examines the public input that was received, it does not explore the concept of representativeness of these comments and how well input reflects the population as a whole. Is input received representative of the transportation desires of the entire community or a select group of individuals and special interest groups? Are efforts made by transportation professionals to seek input that is reflective of the demographic cross section of the community and those directly affected by specific transportation projects or are they primarily focused on receiving more input overall, regardless of the source? Exploring this concept would be beneficial in further defining the validity of input received for transportation plans and projects.

On January 21, 2009 President Barack Obama stated: "My administration is committed to creating an unprecedented level of openness in Government. We will work together to ensure the public trust and establish a system of transparency, public participation, and collaboration. Openness will strengthen our democracy and promote efficiency and effectiveness in Government." This statement is indicative of the importance of public input in public policy. At its best, public policy should resolve issues that have a significant impact on the public and ensure that the public interest is being met.

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APPENDICES

Appendix A: NCDOT Public Involvement Toolkit

Public Participation Techniques and the IAP2 Levels of Public Impact

Public Participation Techniques	Inform	Consult	Involve	Collaborate	Empower
Web sites	[X]	[X]	[X]	[X]	[X]
Audiocasts/Podcasts	[X]	[ ]	[ ]	[ ]	[ ]
Really Simple Syndication (RSS)	[X]	[ ]	[ ]	[ ]	[ ]
Blogs	[X]	[X]	[X]	[ ]	[ ]
Social Networking	[X]	[X]	[X]	[X]	[ ]
Video Sharing	[X]	[ ]	[ ]	[ ]	[ ]
Email	[X]	[X]	[ ]	[ ]	[ ]
Mobile Applications	[X]	[X]	[X]	[X]	[ ]
Virtual Worlds/Online gaming	[X]	[X]	[X]	[X]	[ ]
Crowdsourcing	[X]	[X]	[X]	[X]	[X]
Badges and buttons	[X]	[ ]	[ ]	[ ]	[ ]
Billboards	[X]	[ ]	[ ]	[ ]	[ ]
Brochures	[X]	[ ]	[ ]	[ ]	[ ]
Display boards	[X]	[ ]	[ ]	[ ]	[ ]
Fact sheets/newsletters	[X]	[ ]	[ ]	[ ]	[ ]
Fast-food placemats	[X]	[ ]	[ ]	[ ]	[ ]
Fliers	[X]	[ ]	[ ]	[ ]	[ ]
Grocery bags	[X]	[ ]	[ ]	[ ]	[ ]
Magnets	[X]	[ ]	[ ]	[ ]	[ ]
Models	[X]	[ ]	[ ]	[ ]	[ ]
Posters	[X]	[ ]	[ ]	[ ]	[ ]
Progress bulletins	[X]	[ ]	[ ]	[ ]	[ ]
Report summaries	[X]	[ ]	[ ]	[ ]	[ ]
Utility bill stuffers	[X]	[ ]	[ ]	[ ]	[ ]
Videos	[X]	[ ]	[ ]	[ ]	[ ]
Presentations	[X]	[ ]	[ ]	[ ]	[ ]
Interactive Video Displays and Kiosks	[X]	[X]	[ ]	[ ]	[ ]
Mailing lists	[X]	[ ]	[ ]	[ ]	[ ]
Advertisements	[X]	[ ]	[ ]	[ ]	[ ]
News articles	[X]	[ ]	[ ]	[ ]	[ ]
Newspaper inserts	[X]	[ ]	[ ]	[ ]	[ ]
Notices	[X]	[ ]	[ ]	[ ]	[ ]
Press Releases	[X]	[ ]	[ ]	[ ]	[ ]
Public Service Announcements (PSAs)	[X]	[ ]	[ ]	[ ]	[ ]
Highway Advisory Radio (HAR)	[X]	[ ]	[ ]	[ ]	[ ]
Variable Message Signs (VMS)	[X]	[ ]	[ ]	[ ]	[ ]
Hotlines	[X]	[ ]	[ ]	[ ]	[ ]
Auto attendant	[X]	[ ]	[ ]	[ ]	[ ]
Information bureau	[X]	[ ]	[ ]	[ ]	[ ]
Fax-on-demand	[X]	[ ]	[ ]	[ ]	[ ]
Telethon	[X]	[X]	[ ]	[ ]	[ ]

Electronic town meeting	[X]	[X]	[X]	[ ]	[ ]
Interactive voice response system	[X]	[X]	[ ]	[ ]	[ ]
Out Dialer/Reverse 911	[X]	[ ]	[ ]	[ ]	[ ]
SMS surveys	[ ]	[X]	[ ]	[ ]	[ ]
Education Programs	[X]	[X]	[X]	[ ]	[ ]
Model Organizations	[X]	[X]	[X]	[X]	[X]
Activity Books	[X]	[X]	[ ]	[ ]	[ ]
Competitions	[X]	[ ]	[X]	[X]	[X]
Site Visits	[X]	[X]	[X]	[ ]	[ ]
Transportation Fairs	[X]	[X]	[ ]	[ ]	[ ]
Speakers' Bureaus and Public Involvement Volunteers	[X]	[ ]	[ ]	[ ]	[ ]
Interactive Television	[X]	[X]	[ ]	[ ]	[ ]
Cable broadcast of meetings	[X]	[ ]	[ ]	[ ]	[ ]
Public Opinion Surveys	[ ]	[X]	[ ]	[ ]	[ ]
Handheld Instant Voting	[ ]	[X]	[ ]	[ ]	[ ]
Focus Groups	[X]	[X]	[X]	[ ]	[ ]
Games and Contests	[X]	[X]	[X]	[ ]	[ ]
Drop-In Centers	[X]	[X]	[ ]	[ ]	[ ]
Community Partnerships	[X]	[X]	[X]	[X]	[ ]
Library Partnerships	[X]	[X]	[X]	[X]	[ ]
Steering Committee	[X]	[X]	[X]	[X]	[X]
Civic (Stakeholder/Citizen) Advisory Committees	[X]	[X]	[X]	[X]	[ ]
Citizens on Decision and Policy Bodies	[X]	[X]	[X]	[X]	[X]
Collaborative Task Forces	[X]	[X]	[X]	[X]	[ ]
Public Meetings/Hearings	[X]	[X]	[X]	[ ]	[ ]
Open Houses/Open Forum Hearings	[X]	[X]	[ ]	[ ]	[ ]
Conferences/Workshops/Retreats	[X]	[X]	[X]	[X]	[ ]
Technology Driven Public Meetings	[X]	[X]	[X]	[X]	[ ]
Non-traditional meeting places and events	[X]	[X]	[X]	[ ]	[ ]
Virtual Meetings/Workshops	[X]	[X]	[X]	[ ]	[ ]
Brainstorming	[X]	[X]	[X]	[ ]	[ ]
Charrettes	[X]	[X]	[X]	[X]	[ ]
Visioning	[X]	[X]	[X]	[X]	[ ]
Small Groups	[X]	[X]	[X]	[ ]	[ ]
Teleconferencing/video conferencing	[X]	[X]	[ ]	[ ]	[ ]
Key Person Interviews	[X]	[X]	[X]	[ ]	[ ]
Briefings	[X]	[X]	[ ]	[ ]	[ ]
Facilitation	[ ]	[X]	[X]	[X]	[ ]
Negotiation and Mediation	[ ]	[X]	[X]	[X]	[ ]
Role Playing	[X]	[ ]	[X]	[ ]	[ ]
Citizen juries	[X]	[X]	[X]	[X]	[X]
Videos	[X]	[ ]	[ ]	[ ]	[ ]
Disposable camera	[X]	[X]	[ ]	[ ]	[ ]
Models	[X]	[ ]	[ ]	[ ]	[ ]
Displays	[X]	[ ]	[ ]	[ ]	[ ]
3D Visualization	[X]	[ ]	[ ]	[ ]	[ ]
Visual Preference Surveys	[X]	[X]	[X]	[ ]	[ ]

Plan or Text Markup Software	[X]	[X]	[X]	[ ]	[ ]
Public Participation Geographic Information Systems (PPGIS)	[X]	[X]	[X]	[X]	[ ]
Remote Sensing Applications	[ ]	[X]	[X]	[ ]	[ ]
GIS mapping	[X]	[ ]	[ ]	[ ]	[ ]
Stakeholder partnerships	[X]	[X]	[X]	[X]	[ ]
Visualization Techniques	[ ]	[ ]	[ ]	[ ]	[ ]

Appendix B: Techniques Employed by MPOs

Technique	Description (Based on NCDOT Public Involvement Toolkit, Literature Review and Findings)
Cable Access Television	Also known as public-access television, this is a form of non-commercial mass media in which government or non-profit entities create television programming which is cablecast through cable TV specialty channels. Public-Access Television is often grouped with public, educational, and government access television. MPOs used cable access television to share information about the metropolitan planning process.
Citizens Advisory Committee (s)	Citizen Advisory Committees are entities which consist of volunteer citizens from the community they represent. These committees provided a conduit for MPOs to receive input from citizens on the aspects of the transportation planning process. Citizen Advisory Committees tend to add to the deliberative quality of a democracy by involving everyday citizens in policy development processes.
Community Partnership	Community partnerships are cooperative working relationships between agencies and community-based organizations. In these partnerships, the organization helps the agency achieve greater public participation in project or planning efforts and, in return, working with the agency helps ensure the needs and concerns of the community are understood and addressed by the agency.
Direct mail to citizens and interested parties	This is a direct marketing method in which prospects receive specific information via ordinary mail. Agencies usually develop lists of interested persons or parties based on past participants or others that have requested to receive information about agency activities and projects.
Email to citizens and interested parties (distribution list)	This is a direct marketing method in which prospects receive specific information via email. Agencies usually develop lists of interested persons or parties based on past participants or others that have requested to receive information about agency activities and projects.
Fliers	A pamphlet, handout or circular for mass distribution, fliers are used to share information about agency events, projects or initiatives. Fliers are used to share specific information about upcoming events or inform recipients about how find additional information on an agency initiative.
Focus Groups	A focus group is a form of qualitative research in which a group of people are asked about their perceptions, opinions, beliefs, and attitudes towards a product, service, concept, advertisement, idea, or packaging. Questions are asked in an interactive group setting where participants are free to talk with other group members. Though focus groups are not normally deliberative in nature, they can be used to debate certain topics and issues.

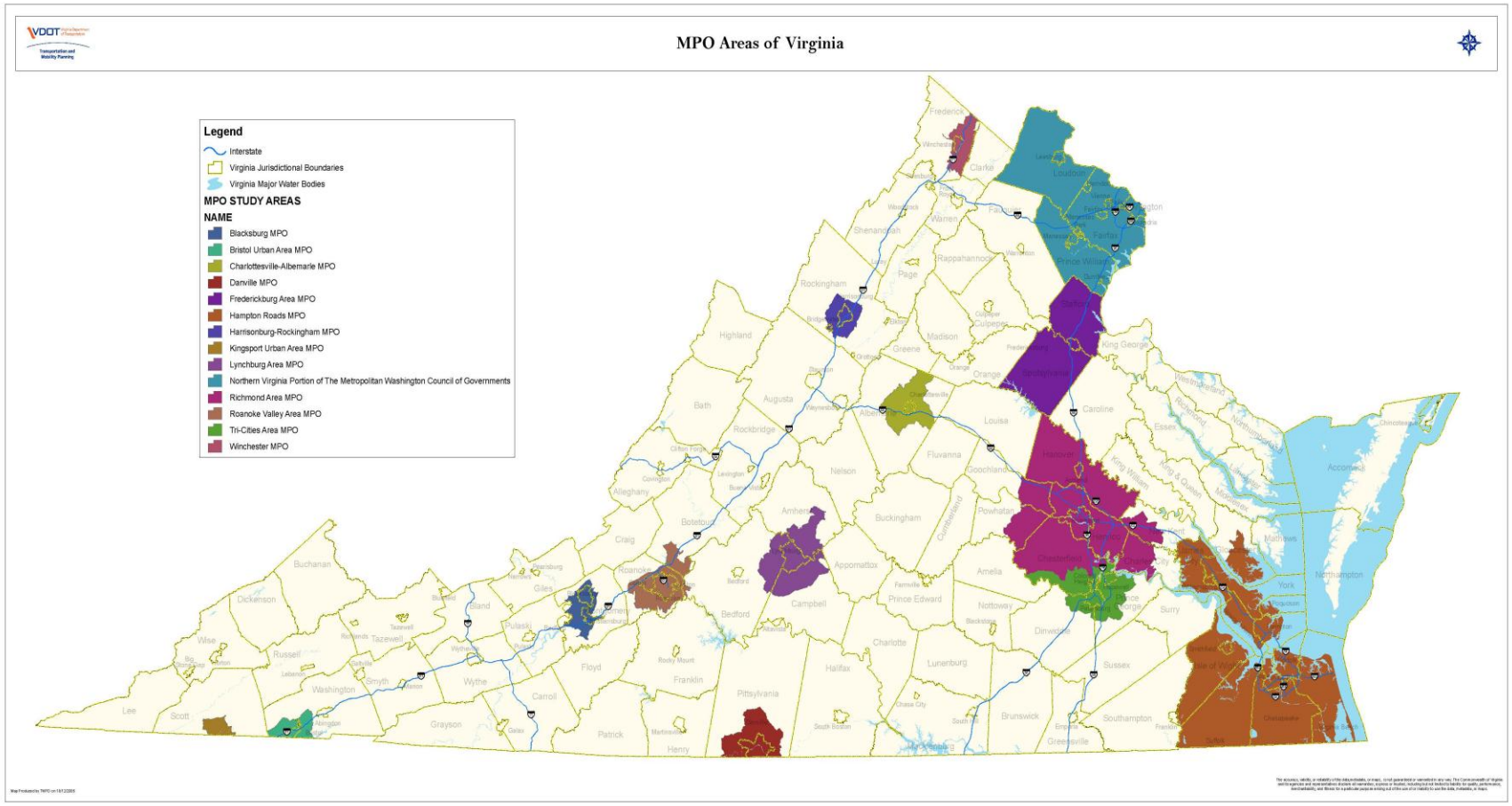
Hard Copy Document Availability for Review	Agency documents are made available for a distinct period of time (usually 15 to 30 days) for public review and comments. Though documents may be available online for review, hard copies of these documents can be placed at libraries, community centers, and public agency offices for public access and review.
Kiosk(s)	A kiosk is a small physical structure (often including a computer and a display screen) that displays information for interested people walking by and is normally placed in public areas. Kiosks can be used to share information with the public and also gather information from the public via surveys. Kiosks let users interact and can include touch screens, sound, and motion video.
Neighborhood Meetings	Held in pre-identified neighborhoods with target populations, meetings are held with citizens groups to provide briefings on specific topics. Briefings usually involve issue-focused communication between agency administrators, project managers, board members, or other staff and a specific group or part of the community.
Newsletter	A newsletter is a regularly distributed publication generally about one main topic that is of interest to its subscribers. Newsletters may be delivered electronically via email (e-Newsletters), ordinary mail, or made available for pick up at agency offices.
Newspaper Advertisements	This is a printed advertisement that is published in a newspaper.
Newspaper Interviews/Articles	Articles printed in newspapers based on information gathered through interviews, research, or presentations or other agency documents.
Newspaper Insert	This can be a pamphlet, handout or circular inserted into a newspaper and used to share information about agency events, projects or initiatives.
Open Public Comment Period	Agency documents are made available for a distinct period of time (usually 15 to 30 days) for public review and comments. During this period citizens, stakeholders, and special interest groups may formally submit comments for agency consideration on specific documents, plans, projects, or policies.
"Piggy-back" on other events	When other agencies or community entities hold events, agencies may "piggy-back" on these events by attending and sharing information with attendees and participants. This provides agencies access to an audience that has assembled for another purpose but would benefit from agency information.
Presentations to City Council	Presentations or briefings are provided at meetings in an effort to provide information to the City Council, elected officials, and others gathered
Presentations to Community Groups	Presentations or briefings are information sessions or meetings with community groups or leaders. Elected officials, business

	leaders, the media, regional groups, or special interest groups can participate. Briefings usually involve issue-focused communication between agency administrators, project managers, board members, or other staff and a specific group or part of the community.
Press releases	A press release, news release, or media statement is a written communication directed at members of the news media for the purpose of announcing important or newsworthy information. Typically, they are mailed, faxed, or e-mailed to targeted persons at newspapers, magazines, radio stations, television stations, or television networks.
Public comment during MPO meeting	This is specific portion of time set aside during meetings when members of the public are allowed to address Board members regarding specific topics or concerns. In some cases, members of the public are asked to sign up prior to providing comments. In many cases, a limited amount of time is allowed per person.
Public Hearing	A public hearing is a more formal event than a public meeting. Held prior to a decision point, a public hearing gathers community comments and positions from all interested parties for public record and input into decisions. Public notices in a general circulation newspaper cite the time, date, and place of a hearing. The period between notice and hearing dates provides time for preparing comments for submission to an agency. During this period, the agency accepts questions and provides clarification on specific issues that are raised.
Public Information Meeting	Public information meetings and open houses provide an informal setting in which citizens are provided with information about a policy, plan or project. It has no set, formal agenda. Unlike a meeting, no formal discussions and presentations take place, and there are no audience seats. Instead, people get information informally from exhibits and citizens are encouraged to give opinions, comments, and preferences to staff either orally or in writing.
Public Information Officer Outreach	Targeted outreach to public information officers of communities and agencies. Similar to press releases, newsworthy information is shared with these persons with the expectation that it will be shared with the wider community.
Radio advertisements	An audio advertisement shared though commercial or public radio stations.
School Outreach	Student outreach encompasses activities and methods for involving students in transportation issues. An education program is a series of lesson plans, activities, or special outings for elementary, middle and high school students designed to educate them about transportation in general as well as specific topic areas such as history, the environment, and transportation planning. By also engaging parents, school outreach programs

	provide policy information to citizens and educate future generations.
Social Media	Social media refers to the means of interactions among people in which they create, share, and exchange information and ideas in virtual communities and networks. Social networking services provide a forum for building on-line communities that share common interests. The most commonly used Web-based social networking services provide users with a variety of means of interaction. These include chat capabilities, e-mail and blog posts. Popular social networking sites include Facebook, You Tube and Twitter.
Speakers Bureau	Speakers' bureaus are groups of specially-trained representatives who can speak about a process or program. They can be community people or agency staff. Bureau members meet with public and private organizations and groups on behalf of a project, program, or planning activity. Members of a speakers' bureau provide information about planning or project activities, listen to people's concerns, answer questions, and seek continued participation and input from the public. Agencies sometimes call them "listeners' bureaus" to emphasize two-way communication and the intention to listen to the public.
Survey	Public opinion surveys assess public opinion on a topic. In a representative survey, an agency administers a survey to a sample group of people via a written questionnaire or through interviews in person, by phone, or by electronic media. The limited sample of people is considered representative of a larger group. In most cases in this study, surveys were not administered to a representative sample, but were completed by participants at an event, visitors to a website, persons on a distribution list, or kiosk users.
Webcast	A webcast is a media presentation distributed over the Internet using streaming media technology to distribute a single content source to many simultaneous listeners/viewers. A webcast may either be distributed live or on demand. Essentially, webcasting is “broadcasting” over the Internet.
Website	A website is a connected group of pages on the World Wide Web regarded as a single entity, usually maintained by one person or organization and devoted to a single topic or several closely related topics. Websites are primary used to share information but can also gather information from the public via emails, comment windows, or surveys.
Workshops	A workshop is a task-oriented meeting organized around a particular topic or activity. Typically, it involves a relatively small group (20–40) and addresses aspects of a narrowly-defined topic. Workshops are usually one to three hours in duration for small groups to work on specific agenda. Because

	they are relatively short and task-focused, workshops can be part of a larger meeting, conference, or retreat.

Appendix C: Map of Virginia Metropolitan Areas



Appendix D: Preliminary Data Collection Protocol

To begin data collection procedures, each MPO website will be visited to download the following documents: The Unified Planning Work Program (UPWP), the Public Participation Plan (PPP), the Metropolitan Transportation Plan (MTP), the MPO Bylaws, Environmental Justice and Title VI Plan, meeting minutes, and other relevant statistical and programmatic information to develop profile an MPO profile. If information is not available on the website, a written request for information will be made. If needed, a site visit will be made.

1. Compilation of MPO Profiles

   For each MPO, a demographic profile will be developed. Each MPO will be assigned a number and, for each MPO, the following information will be collected:

   - MPO Name
   - Population and demographic profile
   - Transportation Management Area Designation (population > 200,000)
   - Number of Member Jurisdictions
   - Number of Voting Members on Policy Board
   - What is the voting structure?
   - What is the meeting schedule?
   - Are meetings open to the Public?
   - What other committees are a part of the MPO structure?
   - When was the PPP adopted?
   - Is it measured for effectiveness? How?
   - When was the last MTP adopted?
   - How long was the development process?
   - What steps were taken in the development of the MTP?
   - Is there a separate plan to involve the public in the development of the MTP?
   - Has the MTP been amended? If so, what was the amendment? What process was taken to amend the plan?
   - Other?

2. Development of MPO Public Participation Characterization

   Through an analysis of the PPP, reports, minutes, the MPO website, and the UPWP, the following data will be collected:

   - Does the Adopted PPP include defined goals?
   - What is the overall budget for the MPO?
   - What is the budget for public participation activities?
   - What percentage of the budget is allocated for public participation?
   - When the MTP was initiated, was input gathered from the public?
   - Was public input gathered to construct goals for the MTP?
   - Was public input gathered before the alternatives were developed?

- Was there public input at the following stages of plan development:
    - The development of alternatives?
    - The development of solutions (projects or scenarios)?
    - The adoption of the draft plan?
    - The adoption of the final plan?
    - At other times?
- Was all technical information made available to the public?
- Was technical information shared in an understandable way?
- Was information verbally explained to the public?
- How many public participation techniques were used throughout the development of the MTP?
- Was outreach targeted to low-income and minority populations?
- Was social media used?
- Did staff go to the public or did the public come to the staff?
- Were responses provided to all verbal and written comments received?

3. Assessment of Public Participation Techniques Used

   The PPP, EJ and Title VI plans, and MPO website will be reviewed to capture an all-inclusive list of public participation techniques that were used connected with the development of the MTP. These techniques will be identified on the NCDOT Public Participation Toolkit list of Techniques (Appendix A) and assigned to 1 or more levels of engagement. These techniques will also be labeled as a deliberation technique if, during the public participation, the following criteria were met:

   - Information related to the MTP was provided to citizens;
   - Citizens were provided the opportunity to review, discuss and debate the information;
   - Citizens were provided an opportunity to reach an agreed upon decision either with MPO staff, decision makers or among themselves; and
   - MPO Staff or Board received individual or collective feedback or a recommendation that is reflective of the outcome of the deliberation process.

4. Review of Public Participation Outputs and Checklist Development

   Records of outputs from public participation conducted in association with the MTP will be requested. Content analysis will be used to review the data records. Based on the themes that emerge from the content analysis of the public comments, a check list will be developed listing the public priorities based on the public input.

5. Checklist Review of MTP

The MTPs for each MPO will be reviewed for inclusion of the items listed on the checklist developed from the synthesis of public input. A determination will be made of whether or not (and at what level) the plan reflects public input.

Appendix E: Email Requesting Supplemental Data

Dear _____,

I am a doctoral student in the Wilder School of Government and Public Affairs, Virginia Commonwealth University. As a part of the requirements for my Ph. D. degree, I am conducting a dissertation research on how public participation affects transportation planning decisions in the Metropolitan Planning Organizations (MPO) in Virginia. The aim of this dissertation is to gain insight into how the characteristics of a public participation program, the level of engagement, and deliberation affect the development of the Metropolitan Transportation Plan (MTP). To accomplish this project, I am conducting an in depth analysis of MPO documents that are related to the development and adoption of your MTP. Documents being reviewed include the most recently approved MTP, the adopted Public Participation Plan, the Unified Planning Work Program (UPWP) for the year the MTP was adopted, as well as other documents related to the public participation that was conducted during the MTP development process. This dissertation research and its findings can help improve the effectiveness of public participation in the metropolitan planning process.

While most of the information I require to conduct this study was available on your website, there are a few documents that, if available, would help me in the completion of this study. I have attached a list of public documents and data that I am requesting be made available. If this information is available on your website and I have overlooked it, please provide a link to the information. Otherwise, please forward electronic copies of the requested materials to my email at bellingerun@vcu.edu. If electronic copies of the requested materials are not available, please contact me so that other arrangements can be made to collect the information. I can be reached on my mobile phone at 757-373-1805.Your assistance would be greatly appreciated.

Should you have questions about the study or it process, please feel free to contact me or my dissertation Director:

Blue Wooldridge, D. P. A
Professor and Fellow, National Academy of Public Administration
L. Douglas Wilder School of Government and Public Affairs
Virginia Commonwealth University
P. O. Box 842028
Richmond, VA 23284 – 2028
Phone: (804) 828-8037
Fax: (804) 827-1275
Email: bwooldri@vcu.edu

Thanks in advance for your assistance.

Regards,
Unwanna B. Dabney

Appendix F: Blacksburg MPO

MPO Profile Public Participation Profile: MPO 1
Blacksburg-Christiansburg-Montgomery (New River Valley) MPO

Sources:
MPO website: http://www.montva.com/content/1146/98/157/default.aspx
Data retrieved: 12/19/2012
Supplemental data provided by: Mr. J. Dan Brugh, MPO Executive Director
Resources reviewed included: MPO webpage; PPP; UPWP; MTP; 2035 MPO Kickoff Meeting document; BCM Plan Update Schedule; BCM Schedule to Complete; Milestones and Status document; Public Meeting sign I sheets; November 4, 2010 Meeting minutes; Public Meeting Materials

Phase I:

General MPO Information

MPO Name	Blacksburg-Christiansburg-Montgomery MPO; New River Valley MPO (as of 2013)
Population	79,260
TMA/Non-TMA	Non-TMA
Member Jurisdictions	At the time of last MTP update: Towns of Blacksburg and Christiansburg, and a portion of Montgomery county. Currently: Towns of Blacksburg and Christiansburg, the City of Radford, and portions of Montgomery and Pulaski Country
Number of Voting Members	7 - Montgomery County(2); Town of Blacksburg (2); Town of Christiansburg (2); and the Virginia Department of Transportation (1)
Voting Structure: Equal/Weighted/Both	Equal among voting members
Meeting Schedule:	Monthly
Meetings Open to Public:	Yes
Other Committees	Technical Advisory Committee
Funding Year (UPWP)	July 1, 2010 – June 30, 2011

Public Participation Plan Date	July 12, 2007 (In effect for MTP Adoption), November 1, 2012
MTP Adoption Date	November 4, 2010

Metropolitan Transportation Plan (MTP) Public Participation Summary

MTP Development Timeline	February 2009 – November 2010
Public Involvement for MTP	• For the 2035 Plan, a public information meeting was held on August 18, 2010. The primary goals of this meeting were to: - Provide data and analysis relative to both existing and future conditions for all modes of transportation within the MPO area; and - Allow for public input for the study team to use when developing recommendations to address existing and future transportation needs. • The major comments received at the public meeting related to the lack of lack of connectivity with respect to paratransit between Blacksburg and Christiansburg, as well as the lack of service to Radford. Specific comments related to the concern that administrative and legal impediments to providing service across jurisdictions greatly reduced the viability and value of paratransit, and that the region should consider providing service across jurisdictions, perhaps including service to Radford and Dublin. Additional comments suggested that the region might consider coorperative agreements with local taxicab companies so that those who need the service can use taxis (either paid for entirely or subsidized). It was suggested that this might be a cost-effective approach. This enhances the service at a relatively low cost (contracting taxi services can be cheaper than providing such services outright) and also provides more customers for taxis thereby allowing taxis to play a greater role in the overall mix of regional transportation services. Several areas with pedestrian concerns were also noted at the meeting. These include Prices Fork and Main Street in Blacksburg, along Main Street near the Virginia Tech Mall, and Peppers Ferry Road and North Franklin Street in the New River Valley Mall area. It was suggested that consideration might be given to providing either pedestrian tunnels or overpasses at some locations. • A public hearing to allow the public to review draft recommendations for inclusion in the Plan was held on September 29, 2010. Meeting attendees were supportive of the recommendations and did not provide any specific comments to the study team.

Characteristics of Public Participation

Characteristic	Criteria	Description
Well Defined PPP	Goals in PPP?	No
	Objectives for Goals?	No
	Measures of Effectiveness for accomplishing goals	No
Funding Level:	Overall Budget	$438,641
	PP Budget	$34,000
	%	7.75% (Calculated)
Early and Continuous Participation	Was there public input at the following stages of Plan Development:	
	Was there Public Input when MTP was initiated?	No
	During the development of Alternatives?	Yes
	Review of Draft Plan?	Yes
	Before Final Plan Adoption?	Yes
Complete Information	Was all technical information made available to the public?	Yes
	Was technical information displayed using visualization techniques?	Yes
	Was technical information verbally explained to the public?	Yes

Broad Outreach	No. of Techniques Used	1. Open Public Comment Period 2. Public Information meetings 3. Public Hearing (During MPO Meeting) 4. Website
	Outreach to low-income and minority populations	Yes
	Geographic Diversity/Outgoing vs Incoming	No
	Info Available in multiple Languages	No
Responsiveness	Were specific comments noted and considered in the body or appendices or the MTP?	Yes
	Were responses provided to comments received?	Yes
	Was customer satisfaction captured or considered as a part of the MTP process?	No

Measurement of Characteristics of MPO Public Involvement

Characteristic	Measurement	Rating
Well Defined PPP:	Y/N	N
Funding Level:	Overall Budget	$438,641
	PP Budget	$34,000
	%	7.75% (Calculated)
	H/M/L	M

Early and Continuous Participation	Y/N	Y
Complete Information Provided	Y/N	Y
Broad Outreach	Y/N	N
Responsiveness	Y/N	Y

Public Participation Techniques Used, Level of Engagement, Deliberation

Technique Used	Phase of Plan Development:				Inform	Consult	Involve	Collaborate	Empower	Deliberation
	Initiation	Alternatives Development	Draft MTP	Final MTP						Y/N
Open Public Comment Period			X			X				N
Public Information meeting		X			X	X				N
Public Hearing (During MPO Meeting)			X		X	X				N
Website		X	X	X	X	X				N

Phase II: Reflections of Public Input in MTP

Quantity of Participation

Technique	**No. of Comments/Input Received**
Open Public Comment Period	0
Public Information meetings	1

Public Hearing (During MPO Meeting)	0
Website	0

Outputs of Participation

Comment/Input Received	Source of Input	Associated PP Technique	(Theme) Input Related to:	Occurrences
Lack of connectivity in paratransit between Blacksburg and Christians burg Recommend rapid transit service between downtown areas in Blacksburg, Christiansburg, and Radford Improve pedestrian accommodations	Summary of verbal comment	Public Information Meeting	Modal Choices Transit/ Paratransit Projects Recommendations Various Locations	1

Metropolitan Transportation Plan Analysis

Collective Public Input	Input Reflected in Transportation Plan			Comments
	Negative Outcome	Inherent Outcome	Positive Outcome	
Lack of connectivity in paratransit between Blacksburg and Christiansburg; Recommend rapid transit service between downtown areas in Blacksburg, Christiansburg, and Radford; Improve pedestrian accommodations			X	
Total:	**-**	**-**	**1**	

Appendix G: Bristol MPO

MPO Profile Public Participation Profile: MPO 2
Bristol MPO

Sources:
MPO website: http://www.bristoltn.org/transportation.cfm
Data retrieved: 12/19/2012
Supplemental data provided by: Mr. Rex Montgomery, Transportation Planning Manager
Resources reviewed included: MPO webpage; MPO Prospectus; 2007 Public Participation Plan; 2011 Unified Planning Work Program; BRISTOL URBAN AREALONG-RANGE TRANSPORTATION PLAN YEAR 2035; Public Hearing Materials; Newspaper Advertisements; February 1, 2011 meeting minutes.

Phase I:

General MPO Information

MPO Name	Bristol Metropolitan Planning Organization
Population	93,307
TMA/Non-TMA	Non-TMA
Member Jurisdictions	City of Bristol Tennessee, the City of Bluff City Tennessee, the City of Bristol Virginia, and a portion of Sullivan County, Tennessee and Washington County, Virginia
Number of Voting Members	8 - State of Tennessee, Governor (or appointee) (1); Commonwealth of Virginia, Governor (or appointee (1); City of Bristol, Tennessee, Mayor (1); City of Bristol, Virginia, Mayor (1); Bluff City, Tennessee, Mayor (1); Sullivan County, Tennessee, Mayor (1); Washington County, Virginia (1), Chairman Board of Supervisors (1)
Voting Structure: Equal/Weighted/Both	Equal among voting members
Meeting Schedule:	As required – on average 3 times a year
Meetings Open to Public:	Yes

Other Committees	Technical Committee
Funding Year (UPWP)	July 1, 2010 – June 30, 2011
Public Participation Plan Date	October 29, 2007; Updates considered October 20, 2011
MTP Adoption Date	February 1, 2011

Metropolitan Transportation Plan Public Participation Summary

MTP Development Timeline	The plan was developed from August 2010 to February 2011. Public involvement took place December 2010 through plan adoption on February 1, 2011.
Public Involvement for MTP	• The MTP contained this statement from the PPP "Adoption of amendments to the plan will follow the MPO's policy for public participation, which requires a 30-day public review period. All comments received either verbally or in writing are presented to the MPO Executive Board. The MPO staff will prepare a written response to the comments to be incorporated into the document, or suggest amendments to the draft document. After evaluation of comments received, the Executive Board may defer the adoption of the plan if there are significant unresolved issues. Public review and comment opportunities are provided when the Plan is originally adopted as well as for amendments, with the exception of projects deemed to be generally local in nature and scale of the project." • Two informational meetings were held on January 25, 2011 for the review of the Draft MTP. • A 30 day public review period began on December 29, 2010 and the document was made available on the MPO website and at Town and County offices, a public library, and community centers and agencies serving low income areas. • Survey forms were made available and 4 responses were received. A summary of these results were included in the MTP. • A post card was mailed to identified interested parties

Characteristics of Public Participation

Characteristic	Criteria	Description
Well Defined PPP	Goals in PPP?	Yes
	Objectives?	Yes
	Measures of Effectiveness	Yes
Funding Level:	Overall Budget	$361,147
	PP Budget	Public participation is considered a part of Program Administration ($85,687). Public participation represents 3 of 14 administrative duties and it is estimated that roughly $18,361 of the Program Administration funds we budgeted for public participation. (estimated based on UPWP)
	%	Approximately 5% (Calculated)
Early and Continuous Participation	Was there public input during the following stages of Plan Development:	
	Was there Public Input when MTP was initiated?	No
	During the development of Alternatives?	No
	Review of Draft Plan?	Yes
	Before Final Plan Adoption?	Yes
Complete Information	Was all technical information made available to the public?	No
	Was technical information displayed using visualization techniques?	Yes
	Was technical information verbally explained to the public?	Yes
Broad Outreach	No. of Techniques Used	1. Direct mail to citizens and interested parties 2. Hard Copy Document Availability 3. Newspaper Advertisements 4. Open Public Comment Period

		5. Press releases 6. Public Comment during MPO meeting 7. Public Information Meeting 8. Website
	Outreach to low-income and minority populations	Yes
	Geographic Diversity/Outgoing vs Incoming	No
	Info Available in multiple Languages	No
Responsiveness	Were specific comments noted and considered in the body or appendices or the MTP?	No
	Were responses provided to comments received?	No
	Was customer satisfaction captured or considered as a part of the MTP process?	Yes

Measurement of Characteristics of MPO Public Involvement

Characteristic	Measurement	Rating
Well Defined PPP:	Y/N	Y
Funding Level:	Overall Budget	$361,147
	PP Budget	$18,361
	%	5%
	Y/N	N
Early and Continuous Participation	Y/N	N

Complete Information Provided	Y/N	N
Broad Outreach	Y/N	N
Responsiveness	Y/N	Y

Public Participation Techniques Used, Level of Engagement, Deliberation

Technique Used	Phase of Plan Development:				Inform	Consult	Involve	Collaborate	Empower	Deliberation
Name	Initiation	Alternatives Development	Draft MTP	Final MTP						Y/N
Direct mail to citizens and interested parties			X		X	X				N
Hard Copy Document Availability			X		X					N
Newspaper Advertisements			X	X	X					N
Open Public Comment Period			X			X				N
Press releases			X		X					N
Public comment during MPO meeting				X	X	X				N
Public Information Meeting			X		X	X				N
Survey (other)			X							N
Website			X	X						N

Phase II: Reflections of Public Input in MTP

Quantity of Participation

Technique	No. of Comments Received/Respondents
Direct mail to citizens and interested parties	-
Hard Copy Document Availability	-
Newspaper Advertisements	-
Open Public Comment Period	0
Press releases	-
Public comment during MPO meeting	0
Public Information Meeting	1
Survey (other)	4
Website	-

Outputs of Participation

Input	Source of Input	Associated PP Technique	(Theme) Input Related to:	Frequency of Occurrence
			Goals	
Provide Better Maintenance of Existing Roads	Survey response	Public Information Meeting/Survey Form	Maintain existing network	75%
			Modal Choices	
Expand Transit and Paratransit service beyond the current levels during the next 20 years; Increase use of improved technologies in scheduling on-demand transit service	Written Comment	Public Information Meeting	Expand Transit and Paratransit Service Improve Transit Service Technology	1

Improve and expand transit services	Survey response	Public Information Meeting/Survey Form	Improve and expand transit services	75%
Expanding bicycle network; more bike lanes	Survey response	Public Information Meeting/Survey Form	Expand bicycle network	100%; 1 comment
Constructing more sidewalks; more sidewalks	Survey response	Public Information Meeting/Survey Form	Expand pedestrian network	100%; 1 comment
Improving railroads so more freight can travel by rail instead of trucks	Survey response	Public Information Meeting/Survey Form	Improve rail network	75%
Develop passenger railroad service	Survey response	Public Information Meeting/Survey Form	Develop passenger rail service	100%
			Project Recommendations	
Extend Hospital Blvd	Survey comment	Public Information Meeting/Survey Form	Extend Hospital Blvd.	1
Improve Pennsylvania/Virginia Ave	Survey comment	Public Information Meeting/Survey Form	Improve Pennsylvania/Virginia Ave	1
Improve West State Street	Survey comment	Public Information Meeting/Survey Form	Improve West State Street	1
Traffic signals need to work together	Survey comment	Public Information Meeting/Survey Form	Synchronize Signals	1
Upgrade US 421	Survey comment	Public Information Meeting/Survey Form	Upgrade US 421	1

Metropolitan Transportation Plan Analysis

Collective Public Input	Input Reflected in Transportation Plan			Comments
	Negative Outcome	Inherent Outcome	Positive Outcome	
Expand Transit and Paratransit Service and Technology	X			
Maintain existing (road) network		X		
Expand bicycle network		X		
Expand pedestrian network		X		
Improve (freight) rail network		X		
Develop passenger rail service	X			
Extend Hospital Blvd.	X			
Improve Pennsylvania/Virginia Ave		X		
Improve West State Street		X		
Upgrade US 421		X		
Synchronize Signals		X		
Total:	**3**	**8**	**-**	

Appendix H: Central Virginia MPO

MPO Profile Public Participation Profile: MPO 3
Central Virginia (Lynchburg) MPO

Sources:
MPO website: http://www.region2000.org/metropolitan-planning-organization.html
Data retrieved: 12/19/2012
Supplemental data provided by: Mr. Bob White, Deputy Director of Planning and Core Services
Resources reviewed included: MPO webpage; MPO Bylaws; 2010 Public Participation Plan; 2011 Unified Planning Work Program; Central Virginia Long Range Transportation Plan Year 2035; October 2010 MPO Meeting minutes; Newspaper Advertisements; Public Meeting Materials; Focus Group and Workshop summaries.

Phase I:

General MPO Information

MPO Name	Central Virginia Metropolitan Planning Organization
Population	153,316
TMA/Non-TMA	Non-TMA
Member Jurisdictions	City of Bedford; City of Lynchburg; Amherst County; Town of Amherst; Campbell County
Number of Voting Members	11 - Voting Membership shall be composed of 2 voting member from each locality and 1 representative from the Virginia Department of Transportation. City of Bedford (2); City of Lynchburg (2); Amherst County (2); Town of Amherst (2); Campbell County (2); Virginia Department of Transportation (1).
Voting Structure: Equal/Weighted/Both	Each voting member shall have 1 equal vote
Meeting Schedule:	Quarterly
Meetings Open to Public:	Yes
Other Committees	Transportation Technical Committee

Funding Year (UPWP)	2010-2011
Public Participation Plan Date	April 2010
MTP Adoption Date	October, 2010

Metropolitan Transportation Plan Public Participation Summary

MTP Development Timeline	January 2009 to final adoption October 2010
Public Involvement for MTP	• The public process included maintenance of a project website, four focus group sessions, three public workshops, multiple presentations to the MPO Policy Board, frequent presentations to the technical advisory committee, and presentation of the plan at a public hearing. • Between October 5th and 7th, 2009, the study team conducted four focus group sessions. Theobjective of the focus group meetings was to identify stakeholder values and priorities, communicate information and issues to be considered in the transportation planning process, and encourage participation in the scenario planning process. Topics such as "Where are We Now?" and "Where are We Going?" were discussed by explaining Central Virginia's current and anticipated land development patterns, with an emphasis on place types. Feedback was solicited during the discussions to identify stakeholder values and their sense of how anticipated development and transportation investments will address individual and regional needs. Ideas on key themes, issues, opportunities and specific investments and strategies to consider in the planning process were recorded. The sessions concluded with a discussion about how their input will be used in the scenario planning process and the attendees were encouraged to participate in upcoming public workshops. • Public Workshop #1- The first of three workshops for the project was held at Liberty University on November 17, at 6PM. Seventeen attendees participated in the work session. The objective of this first workshop was to explore alternative growth scenarios for the region based on the community values identified in the previously conducted focus group sessions.

	• Public Workshop #2 – The second of three workshops for the project was held at City Hall on March 4th, at 6PM. Twenty attendees participated in the work session. The objective of this second workshop was to present the results of the analyses of the alternative growth scenarios that were identified in the prior workshop, then through an interactive discussion, identify the preferred future growth scenario. • Public Workshop #3 – The third of three workshops for the project was held at Lynchburg City Hall on June 2, 2010 at 6:30 PM. Fourteen attendees participated in the work session. The objectives of the third workshop were to provide participants with opportunities to: (1) View and discuss proposed transportation investments for all modes (funded and unfunded) that are anticipated to be necessary in order to accommodate the level of travel demand that would be generated by future development under existing local land use plans and policies; (2) View and discuss the "Alternative Perspective" development scenario that depicts the impacts of land use planning and policy strategies that could help lessen the rate of traffic growth, increase opportunities for transit and pedestrian travel, and support community-wide values and goals for economic development, environmental presentation, and community quality of life; and (3) Provide the planning team with opinions, ideas and suggested "next steps" regarding transportation investment priorities and policy strategies to advance the concepts in the "Alternative Perspective" scenario. • In the Fall of 2010 MPO Policy Board meeting a public hearing was held to accept comments from the public on the proposed plan and a presentation with discussion was conducted regarding the final draft plan.

Characteristics of Public Participation

Characteristic	**Criteria**	**Description**
Well Defined PPP	Goals in PPP?	Yes
	Objectives?	Yes
	Measures of Effectiveness	Yes
Funding Level:	Overall Budget	$331,438
	PP Budget	Public participation is listed as a part of Long Range Planning and General Technical

		Assistance. It is 1of 5 tasks for Long Range Planning ($44,000) at $8,800. Public Participation is referenced as 1 of 7 activities included in General Technical Assistance ($40,000) at $5,714. It is estimated that $14,515 is budgeted for public participation.
	%	4.38% (Calculated).
Early and Continuous Participation	Was there public input during the following stages of Plan Development:	
	Was there Public Input when MTP was initiated?	Yes
	During the development of Alternatives?	Yes
	Review of Draft Plan?	Yes
	Before Final Plan Adoption?	Yes
Complete Information	Was all technical information made available to the public?	Yes
	Was technical information displayed using visualization techniques?	Yes
	Was technical information verbally explained to the public?	Yes
Broad Outreach	Number of Techniques Used	1. Direct mail to citizens and interested parties 2. Email distribution List of citizens and interested parties 3. Focus Groups 4. Hard Copy Document Availability 5. Newspaper Advertisements 6. Open Public Comment Period 7. Public Hearing (during MPO meeting) 8. Website 9. Workshops
	Outreach to low-income and minority populations	Yes

	Geographic Diversity/Outgoing vs Incoming	Yes
	Info Available in multiple Languages	No
Responsiveness	Were specific comments noted and considered in the body or appendices or the MTP?	Yes
	Were responses provided to comments received?	Yes. Focus group summaries were shared and used in successive focus group meetings.
	Was customer satisfaction captured or considered as a part of the MTP process?	No

Measurement of Characteristics of MPO Public Involvement

Characteristic	Measurement	Rating
Well Defined PPP:	Y/N	Y
Funding Level:	Overall Budget	$331,438
	PP Budget	$14,515
	%	4.37%
	H/M/L	L
Early and Continuous Participation	Y/N	Y
Complete Information Provided	Y/N	Y
Broad Outreach	Y/N	N
Responsiveness	Y/N	Y

Public Participation Techniques Used, Level of Engagement, Deliberation

Technique Used	Phase of Plan Development:				Inform	Consult	Involve	Collaborate	Empower	Deliberation
Name	Initiation	Alternatives Development	Draft MTP	Final MTP						Y/N
Direct mail to citizens and interested parties	X	X	X		X					N
Email distribution List of citizens and interested parties	X	X	X		X					N
Focus Groups	X				X	X	X			Y
Hard Copy Document Availability				X	X					N
Newspaper Advertisements		X	X		X					N
Open Public Comment Period				X		X				N
Public Hearing (during MPO meeting)				X	X	X				N
Website	X	X	X	X	X	X				N
Workshops		X	X		X	X	X	X		Y

Phase II: Reflections of Public Input in MTP

Quantity of Participation

Technique	No. of Comments/Participants
Direct mail to citizens and interested parties	-
Email distribution List of citizens and interested parties	-
Focus Groups	54
Hard Copy Document Availability	-
Newspaper Advertisements	-
Open Public Comment Period	0
Public Hearing (during MPO meeting)	0
Website	-
Workshops	51

Outputs of Participation

Input	Source of Input	Associated PP Technique	(Theme) Input Related to:	Frequency of Occurrences
			Goals	
Need transit in Rural Places; address rural elderly transportation needs; transit is difficult in rural low density areas	Focus Group Summary	Focus Groups	Plan for rural transportation needs	4
Improve accessibility for power chairs; need golf cart paths in village communities; more communities that support retirees and elderly	Focus Group Summary	Focus Groups	Plan for aging population's transportation needs	5

Conservation easements; balance convenience and environment	Focus Group Summary	Focus Group	Consider the environment		
Address zoning; balance development; limit development in areas without adequate infrastructure; some subdivisions are too far out; build subdivisions in areas that already have water and sewer; focus growth in existing villages; redevelop existing villages	Focus Group Summary	Focus Groups	Smart growth; Reduce suburban sprawl	8	
Plan for residential development; improve connectivity within suburban residential communities;	Focus Group Summary	Focus Groups	Improve connectivity within subdivisions	3	
Improve linkages to downtown; more linkages for students; support Liberty University	Focus Group Summary	Focus Groups	Support student transportation needs	4	
Like small town feel and appearance; villages are appealing; landscaping and architectural features are nice; Build better quality low-income housing;	Focus Group Summary	Focus Groups	Support small town/village development	7	
mixed use density; better planned communities; shop, live, work without driving; planned communities and villages	Focus Group Summary	Focus Groups	Support mixed use development	5	
Fund transportation projects that support regional economic development strategies	Workshop Summary	Workshops	Support Economic development	1	
Encourage and support comprehensive planning	Workshop Summary	Workshops	Comprehensive planning	1	

Make the transportation planning and land use policies important to local elected officials	Workshop Summary	Workshops	Educate elected officials on land use and transportation	1
Get the topic of land use and transportation planning into the general public's conversation	Workshop Summary	Workshops	Educate general public on land use and transportation	1
			Modal Choices	
More density to support transit; incorporate access to transit in villages; efficient transit with shorter trips; improve transit access to downtown	Focus Group Summary	Focus Groups	Increase regional transit; Improve transit service	6
More bike lanes; steep hills in villages area constraint to biking	Focus Group Summary	Focus Groups	Plan for bicycle accommodations	6
Pedestrian friendly facilities; increase pedestrian activities; encourage walking; more sidewalks to improve connections between stores; extend sidewalks in Wyndhurst	Focus Group Summary	Focus Groups	Plan for walkable communities; Increase/improve pedestrian accommodations	15
			Project Recommendations	
Identify additional funding sources	Focus Group Summary	Focus Groups	Increase funding sources	1
Limit access on existing roads instead of building bypasses; concerns about more bypasses in the region; build more access roads on major roads;	Focus Group Summary	Focus Groups	Improve operations and functionality of existing facilities; access management	5
Improve access to Poplar Forest	Focus Group Summary	Focus Groups	Access to Poplar Forest	1
Improve the 29 corridor; include sidewalks on 29 corridor	Focus Group Summary	Focus Groups	Improve the 29 corridor	5
			Other	

Efficient use of funds; better maintenance of roadside; use more volunteer programs (i.e. Adopt a Highway); narrow steep roads are difficult to maintain	Focus Group Summary	Focus Groups	Plan for road maintenance	6
Improve use of Industrial Park; employment centers instead of industrial parks; limit industrial type development	Focus Group Summary	Focus Groups	Limit industrial development	5
Need park and ride; limit parking; less driving; planned parking	Focus Group Summary	Focus Groups	Consider parking as a transportation demand management strategy	6
Growth Scenario Analysis: "Villages" and "Urban Core" scenarios were preferred over "Trend" and "Corridor" scenarios	Workshop Summary	Workshops	Alternative scenario to current growth trend	4

Metropolitan Transportation Plan Analysis

Collective Public Input	Input Reflected in Transportation Plan			Comments
	Negative Outcome	Inherent Outcome	Positive Outcome	
Consider rural transportation needs			X	
Increase regional transit			X	
Improve transit service		X		
Plan for aging population's transportation needs			X	
Increase funding sources	X			
Consider the environment		X		
Increased planning for bicycle accommodations			X	
Smart growth; Reduce suburban			X	

sprawl				
Improve operations and functionality of existing facilities; access management			X	
Plan for walkable communities; Increase/improve pedestrian accommodations			X	
Plan for road maintenance		X		
Limit industrial development			X	
Access to Poplar Forest	X			
Improve connectivity within subdivisions	X			
Improve the 29 corridor		X		
Consider parking as a transportation demand management strategy			X	
Support student transportation needs			X	
Support small town/village development			X	
Support mixed use development			X	
Alternative scenario to current growth trend			X	
Support Economic development			X	
Encourage comprehensive planning			X	
Educate elected officials on land use and transportation			X	
Educate general public on land use and transportation			X	
Total	**3**	**4**	**17**	

Appendix I: Charlottesville MPO

MPO Profile Public Participation Profile: MPO 4
Charlottesville-Albemarle MPO

Sources:
MPO website: http://www.tjpdc.org/transportation/mpo.asp
Data retrieved: 12/19/2012
Supplemental data provided by: Ms.Sarah Rhodes, MPO Coordinator
Resources reviewed included: MPO webpage; MPO Bylaws; Public Participation Plan; 2009 Unified Planning Work Program; United Jefferson Area Mobility Plan 2035; Staff Data provided by email March, 2013; MPO Agendas and meeting minutes July 2008 – May 2009; CHART Committee Meetings July 2008 – May 2009; Public Meeting Materials; Press Releases
Source of information captured in (parentheses)

Phase I:

General MPO Information

MPO Name	Charlottesville-Albemarle Metropolitan Planning Organization
Population	113,074
TMA/Non-TMA	Non-TMA
Member Jurisdictions	City of Charlottesville, Albemarle County
Number of Voting Members	5 – City of Charlottesville (2); Albemarle County (2); Virginia Department of Transportation (1)
Voting Structure: Equal/Weighted/Both	Equal among voting members
Meeting Schedule:	Every other month
Meetings Open to Public:	Yes
Other Committees	MPO Technical Committee; Citizens Advisory Committee; Rural Technical Committee
Funding Year (UPWP)	July 1, 2008 – June 30, 2009
Public Participation Plan	Adopted August 12, 2002; Revised: February 14, 2005; Revised June 20, 2007, Revised April 22, 2009,

Date	Revised January 23rd 2013
MTP Adoption Date	May 27, 2009

Metropolitan Transportation Plan Public Participation Summary

MTP Development Timeline	The plan development process began in Early 2008 and concluded in May 2009.
Public Involvement for MTP	• TJPDC developed a two phase public participation process to gather input for the Plan. Phase I began in April 2008 with a half-day Regional Planning Summit and the launch of www.unjam.org, including an online survey. Phase I focused on encouraging the public to identify issues and goals for the regional transportation system. These findings became the basis for UnJAM.s regional vision. The online survey was open for several weeks before and after the May 10, 2008 Regional Summit, and residents from all localities in the Planning District responded. • Phase II launched in March 2009 with an UnJAM Open House where citizens and local elected officials reviewed and discussed the draft UnJAM 2035 document. Phase II on www.unjam.org included the draft document posted for public review, as well as interactive and downloadable maps illustrating the proposed projects for the MPO's fiscally constrained long range plan. Comment forms on the website allowed participants to directly share their feedback with planning staff.

Characteristics of Public Participation

Characteristic	Criteria	Description
Well Defined PPP	Goals in PPP?	No
	Objectives?	No
	Measures of Effectiveness	No
Funding Level:	Overall Budget	$415,346
	PP Budget	Public participation related tasks are listed under Task 1 (Administration) in the UPWP. Related activities include A) Committee staffing (CHART is 1 of 7 committees), B) Information sharing (the website is one of 5 tasks) and C) Public

		involvement and participation. The total budget for Task 1 was $111, 804. It is estimated that public participation costs are budgeted at approximately $37,534.
	%	9% (Calculated)
Early and Continuous Participation	Was there public input during the following stages of Plan Development:	
	Was there Public Input when MTP was initiated?	Yes
	During the development of Alternatives?	Yes
	Review of Draft Plan?	Yes
	Before Final Plan Adoption?	Yes
Complete Information	Was all technical information made available to the public?	Yes
	Was technical information displayed using visualization techniques?	Yes
	Was technical information verbally explained to the public?	Yes
Broad Outreach	Techniques Used	1. Citizens Advisory Committee (CHART Committee) 2. Newspaper Advertisements 3. Press Release 4. Public Hearings 5. Public Information Meeting (Open House) 6. Survey (web-based) 7. Website (comment form; interactive map; video footage) 8. Workshops (Regional Planning Summits) (collaborative workbooks)
	Outreach to low-income and minority populations	Yes
	Geographic Diversity/Outgoing vs Incoming	Yes

	Info Available in multiple Languages	Yes
Responsiveness	Were specific comments noted and considered in the body or appendices or the MTP?	Yes
	Were responses provided to comments received?	Yes
	Was customer satisfaction captured or considered as a part of the MTP process?	Yes

Measurement of Characteristics of MPO Public Involvement

Characteristic	Measurement	Rating
Well Defined PPP:	Y/N	N
Funding Level:	Overall Budget	$415,346
	PP Budget	$37,534
	%	9%
	H/M/L	M
Early and Continuous Participation	Y/N	Y
Complete Information Provided	Y/N	Y
Broad Outreach	Y/N	Y
Responsiveness	Y/N	Y

Public Participation Techniques Used, Level of Engagement, Deliberation

Technique Used	Phase of Plan Development:				Inform	Consult	Involve	Collaborate	Empower	Deliberation
	Initiation	Alternatives Developme	Draft MTP	Final MTP						Y/N

		nt								
Citizens Advisory Committee (CHART Committee)	X	X	X	X	X	X	X	X		Y
Newspaper Advertisements				X	X					
Press Release	X	X	X		X					
Public Hearings				X	X	X				N
Public Information Meeting (Open House)			X		X	X				N
Survey (web-based)		X	X			X	X			
Website (comment form; interactive map; video footage)		X	X	X	X	X				
Workshops (Regional Planning Summits) (collaborative workbooks)		X			X	X	X			Y

Phase II: Reflections of Public Input in MTP

Quantity of Participation

Technique	No. of Comments/Input Received
Citizens Advisory Committee (CHART Committee)	12 (Membership)
Newspaper Advertisements	-
Press Release	-
Public Hearings	3

Public Information Meeting (Open House)	Unknown
Survey (web-based)	424 (Respondents)
Website (comment form; interactive map; video footage)	7
Workshops (Regional Planning Summit) (collaborative workbooks)	32

Outputs of Participation

Input	Source of Input	Associated PP Technique	(Theme) Input Related to:	Frequency of Occurrence
			Goals	
The CHART Committee discussed a new vision statement at their September 3, 2008 meeting and endorsed the following preamble and vision statement for the UnJAM 2035 plan. The Committee submits this to the MPO Policy Board and the Commission for review. Preamble: The era of cheap oil is over. This fact, coupled with the adverse effects on our climate caused by the consumption of oil, will increase the need and demand for alternatives to the automobile. Vision: The Thomas Jefferson Planning District's transportation system will provide safe, sustainable,	Meeting Summary	Citizens Advisory Committee (CHART)	Revise Preamble and Vision Statement	N/A

efficient and attractive multi-modal choices, support the movement of people, goods and services, and protect the environment, our communities and quality of life, while addressing regional and statewide transportation needs.				
Compact Development/design; transit ready development; more density; mixed use development	Workshop Summary	Workshop (Community Summit)	Support transit oriented development	11
Volume of traffic	Survey Results	Survey (web-based)	Reduce Congestion	45.35%
			Modal Choices	
I am concerned that little or no comment is included regarding accessible modifications for persons with disabilities. Especially within the city, "walkability" concerns should include a commitment to accessibility-Relative to county projects, sidewalk mods/curb cuts should receive emphasis	Summary of verbal comments	Public Hearing	Plan should address ADA accessibility	1
Inadequate transit system/Lack of transit system	Survey Results	Survey (web-based)	Improve/expand transit system and Service	54%
Lack of Commuter trails for cyclists and pedestrians	Survey Results	Survey (web-based)	Improve/increase bicycle and pedestrian infrastructure	51.79%
Increase/Improve Public Transit	Workshop Summary	Workshop (Community Summit)	Increase/Improve Public Transit	19
Increase/Improve Bicycle and Pedestrian transportation; walkable communities	Workshop Summary	Workshop (Community Summit)	Improve/increase bicycle and pedestrian infrastructure	22
Carpool; Park and Ride	Workshop	Workshop	Increase Transportation Demand	10

	Summary	(Community Summit)	Management Strategies	
			Project Recommendations	
Southern Parkway be restored to the Long-Range plan for the following reasons: it provides a vital link between Avon and Old Lynchburg road, fire vehicles have a 3 and ½ mile urban detour without it, and it provides transit opportunities south of the city. Mr. Pfaltz recommended three million should come from another project. CHART has recommended money come from project I-4. If the MPO eliminates the Southern Parkway from the Long-Range Plan, Mr. Pfaltz said it sends the message regional transit is mostly a matter of "lip service."	Summary of verbal comments	Public Hearing	Restore Southern Parkway to the MTP	1
Interstate 64 interchanges at Rt. 29, Rt. 250, Rt. 20 and Rt. 250 from Rt. 250 (High Street) to Fontaine Ave (Rt. 29) *Split into 2 projects. I64 & 29 and I64& 250 recommended for the CLRP by CHART and MPO Tech*	Project Lists	Citizens Advisory Committee (CHART)	Interstate 64 interchanges at Rt. 29, Rt. 250, Rt. 20 and Rt. 250 from Rt. 250 (High Street) to Fontaine Ave (Rt. 29)	N/A
new I-64 at Shadwell Interchange reconstruction/redesign Improve Operations $40,000,000 $40,000,000 2008 Estimate Recommended by	Project Lists	Citizens Advisory Committee (CHART)	new I-64 at Shadwell Interchange reconstruction/redesign	N/A

CHART				
new I-64 at US 29 Int Interchange reconstruction/redesign Improve Operations $80,000,000 $80,000,000 2008 Estimate Recommended by CHART	Project Lists	Citizens Advisory Committee (CHART)	new I-64 at US 29 Int Interchange reconstruction/redesign	N/A
new Enhanced ITS n/a To support transportation, EMS and public safety Improve Operations TBD Recommended by CHART	Project Lists	Citizens Advisory Committee (CHART)	new Enhanced ITS n/a To support transportation, EMS and public safety Improve Operations	N/A
new Ashwood Boulevard to Polo Grounds Road Connection Extend the existing stub out to create a connection between Ashwood Boulevard and Polo Grounds Road. Alternate route $570,000 $570,000 Recommended by CHART	Project Lists	Citizens Advisory Committee (CHART)	new Ashwood Boulevard to Polo Grounds Road Connection Extend the existing stub out to create a connection between Ashwood Boulevard and Polo Grounds Road.	N/A
new Overlook Drive to Cedwarwood Court Connection Extend the existing Cedarwood cul-du-sac to create a connection to Overlook Drive Alternate route Recommended by CHART	Project Lists	Citizens Advisory Committee (CHART)	new Overlook Drive to Cedwarwood Court Connection Extend the existing Cedarwood cul-du-sac to create a connection to Overlook Drive	N/A
new Rivanna Bike and Pedestrian bridge Br From East Market Street in the City to Pantops area of the County, Funds for Location Study and PE Add capacity, Provide travel choices $10,000,000 $10,000,000	Project Lists	Citizens Advisory Committee (CHART)	new Rivanna Bike and Pedestrian bridge Br From East Market Street in the City to Pantops area of the County, Funds for Location Study and PE	N/A

Recommended by CHART and MPO Tech for the CLRP. Recommended for the Vision List by MPO Policy Board				
I-8 S-1 Old Ivy Road (Route 601) U3 Add turn lanes, sidewalks and bike lanes from Ivy Road to 29/250 Bypass to make the road and underpass suitable for bike and pedestrian traffic Add capacity Improve Safety $9,142,394 $17,000 $9,125,394 Inflated cost to 2018 New wording suggested by CHART/County Staff	Project Lists	Citizens Advisory Committee (CHART)	I-8 S-1 Old Ivy Road (Route 601) U3 Add turn lanes, sidewalks and bike lanes from Ivy Road to 29/250 Bypass to make the road and underpass suitable for bike and pedestrian traffic	N/A
new Avon Street Bridge Bike and Pedestrian Facility U2 Retrofit existing bridge over I-64 with a bike and pedestrian catwalk Add capacity, Provide travel choices $2,000,000 CHART, County Planning Staff	Project Lists	Citizens Advisory Committee (CHART)	new Avon Street Bridge Bike and Pedestrian Facility U2 Retrofit existing bridge over I-64 with a bike and pedestrian catwalk	N/A
new S-4 Sunset Fontaine Connector U2 Connector road from Sunset Avenue to Fontaine Avenue include bike lanes and sidewalks and railroald crossing (under or overpass) Alternate route $9,684,000 CHART, MPO Tech, City and County Staff,	Project Lists	Citizens Advisory Committee (CHART)	new S-4 Sunset Fontaine Connector U2 Connector road from Sunset Avenue to Fontaine Avenue include bike lanes and sidewalks and railroald crossing (under or overpass)	N/A

MPO Policy Board				
new HOV restriction - Meadowcreek Parkway U2 Restrict MCP to HOV at peak hours Increase capacity and reduce travel time Recommended by CHART	Project Lists	Citizens Advisory Committee (CHART)	new HOV restriction - Meadowcreek Parkway U2 Restrict MCP to HOV at peak hours	N/A
new BRT lane US29 U6 Provide an exclusive travel lane for bus rapid transit on US29 Improve transit customer delivery Recommended by CHART	Project Lists	Citizens Advisory Committee (CHART)	new BRT lane US29 U6 Provide an exclusive travel lane for bus rapid transit on US29	N/A
CHART List for Bicycle and Pedestrian Improvements	Project Lists	Citizens Advisory Committee (CHART)	CHART List for Bicycle and Pedestrian Improvements	N/A
Backups at major intersections	Survey Results	Survey (web-based)	Improve Traffic Operations	47%
Unsynchronized stoplights	Survey Results	Survey (web-based)	Improve Traffic Operations	46.54%
Old Lynchburg Road- sidewalks and bike lanes	Workshop Summary	Workshop (Community Summit)	Old Lynchburg Road- sidewalks and bike lanes	1
Berkmar Bridge; Berkmar Drive Exit	Workshop Summary	Workshop (Community Summit)	Berkmar Bridge; Berkmar Drive Exit	2
Transit on Route 29 North	Workshop Summary	Workshop (Community Summit)	Transit on Route 29 North	4
Southern Parkway	Workshop	Workshop	Southern Parkway	1

	Summary	(Community Summit)		
Route 29 (Improvements) Green County to Nelson County	Workshop Summary	Workshop (Community Summit)	Route 29 (Improvements) Green County to Nelson County	2
Route 20 (Improvements) (Southern Area)	Workshop Summary	Workshop (Community Summit)	Route 20 (Improvements) (Southern Area)	1
Route 250 (Improvements) (Southern Area)	Workshop Summary	Workshop (Community Summit)	Route 250 (Improvements) (Southern Area)	1
Route 15 (Improvements) (Southern Area)	Workshop Summary	Workshop (Community Summit)	Route 15 (Improvements) (Southern Area)	1
Route 143/29(Improvements) (Southern Area)	Workshop Summary	Workshop (Community Summit)	Route 143/29(Improvements) (Southern Area)	1
Route 691 (JGR)	Workshop Summary	Workshop (Community Summit)	Route 691 (JGR)	1
Eastern Connector	Workshop Summary	Workshop (Community Summit)	Eastern Connector	1
Zion Crossroads	Workshop Summary	Workshop (Community Summit)	Zion Crossroads	1
Meadow Creek Parkway	Workshop Summary	Workshop (Community Summit)	Meadow Creek Parkway	1
Bridges	Workshop Summary	Workshop (Community Summit)	Improve Bridges	1
Traffic Signals	Workshop	Workshop	Improve Traffic Operations	1

	Summary	(Community Summit)		
Include more emphasis and immediate funding to complete sidewalk gaps, especially in the city (e.g. Monticello Ave from Druid to Altavista).	Online Comment	Open Public Comment Period	Sidewalks in the city (e.g. Monticello Ave from Druid to Altavista).	1
Multi-use path from Millmont to JPJ	Online Comment	Open Public Comment Period	Multi-use path from Millmont to JPJ	1
Multi-use path on Earlysville Road	Online Comment	Open Public Comment Period	Multi-use path on Earlysville Road	1
(Route) 11 should be broadened to include general ADA improvements for sidewalks	Online Comment	Open Public Comment Period	Widen Route 11 to include sidewalks and ADA accessibility	1
Look at more connections to Rivanna Trail via sidewalk	Online Comment	Open Public Comment Period	Sidewalks to connect Rivanna Trail	1
I recommend that a sidewalk bike path be added to fill the gap in Greenbrier Drive from intersection of Brandywine and Greenbrier through the Rivana Trail across Meadowbrook Creek toward the Senior Center. Distance is probably about 300 yards plus maybe a bridge	Online Comment	Open Public Comment Period	Sidewalks: Greenbrier Drive from intersection of Brandywine and Greenbrier through the Rivana Trail across Meadowbrook Creek	1
Bus along Emmet Street by Central Garage	Online Comment	Open Public Comment Period	Transit route: Emmet Street near Central Garage	1
			Funding Recommendations	
Agree or strongly agree to support a statewide tax for maintaining transportation infrastructure	Survey Results	Survey (web-based)	Use tax increases to fund transportation improvements	54.91%
Tax Increase to pay for transit	Workshop Summary	Workshop (Community Summit)	Use tax increases to fund transportation improvements	1
			Other	
166 million in the revenue column	Summary of	Public Hearing	Interstate revenue should read $66M	1

sounded like a lot of money for the interstate program. He said he did a summation of the projects and came up with an amount equal to about 66 million. Mr. Kleeman wondered if there were errors in the calculation since there seems to be 100 million not allocated.	Verbal Comments		not $166M	

Metropolitan Transportation Plan Analysis

Collective Public Input	Input Reflected in Transportation Plan			Comments
	Negative Outcome	Inherent Outcome	Positive Outcome	
Restore Southern Parkway to the MTP	X			
Plan should address ADA accessibility		X		
Preamble: The era of cheap oil is over. This fact, coupled with the adverse effects on our climate caused by the consumption of oil, will increase the need and demand for alternatives to the automobile. Vision: The Thomas Jefferson Planning District's transportation system will provide safe, sustainable, efficient and attractive multi-modal choices, support the movement of people, goods and services, and protect the environment, our communities and quality of life, while addressing regional and statewide transportation needs.			X	
Interstate 64 interchanges at Rt. 29, Rt. 250, Rt. 20 and Rt. 250 from Rt. 250 (High Street) to Fontaine Ave (Rt. 29)			X	
new I-64 at Shadwell Interchange reconstruction/redesign			X	
new I-64 at US 29 Int Interchange reconstruction/redesign			X	
new Enhanced ITS n/a To support transportation, EMS and			X	

public safety Improve Operations				
New Ashwood Boulevard to Polo Grounds Road Connection Extend the existing stub out to create a connection between Ashwood Boulevard and Polo Grounds Road.	X			
New Overlook Drive to Cedarwood Court Connection Extend the existing Cedarwood cul-du-sac to create a connection to Overlook Drive			X*	*Included in Vision Plan
New Rivanna Bike and Pedestrian bridge Br From East Market Street in the City to Pantops area of the County, Funds for Location Study and PE			X	
I-8 S-1 Old Ivy Road (Route 601) U3 Add turn lanes, sidewalks and bike lanes from Ivy Road to 29/250 Bypass to make the road and underpass suitable for bike and pedestrian traffic			X*	*Included in Vision Plan
new Avon Street Bridge Bike and Pedestrian Facility U2 Retrofit existing bridge over I-64 with a bike and pedestrian catwalk			X*	*Included in Vision Plan
new S-4 Sunset Fontaine Connector U2 Connector road from Sunset Avenue to Fontaine Avenue include bike lanes and sidewalks and railroald crossing (under or overpass)			X	
new HOV restriction - Meadowcreek Parkway U2 Restrict MCP to HOV at peak hours		X		
new BRT lane US29 U6 Provide an exclusive travel lane for bus rapid transit on US29		X		
CHART List for Bicycle and Pedestrian Improvements			X	
Improve/expand transit system and Service		X		
Improve/increase bicycle and pedestrian infrastructure		X		

Improve Traffic Operations		X		
Support transit oriented development			X	
Increase Transportation Demand Management Strategies			X	
Old Lynchburg Road- sidewalks and bike lanes			X*	*Included in Vision Plan
Berkmar Bridge; Berkmar Drive Exit			X	
Transit on Route 29 North		X		
Route 29 (Improvements) Green County to Nelson County		X		
Southern Area B Improvements		X		
Route 691 (JGR)	X			
Eastern Connector	X			
Zion Crossroads	X			
Meadow Creek Parkway			X	
Improve Bridges		X		
Sidewalks in the city (e.g. Monticello Ave from Druid to Altavista).		X		
Multi-use path from Millmont to JPJ			X	
Multi-use path on Earlysville Road			X	
Sidewalks to connect Rivanna Trail			X	
Sidewalks: Greenbrier Drive from intersection of Brandywine and Greenbrier through the Rivana Trail across Meadowbrook Creek			X	
Total	**5**	**11**	**20**	

Appendix J: Danville MPO

MPO Profile Public Participation Profile: MPO 5
Danville MPO
(Source of information captured in parentheses. Data retrieved from Internet website 1/5/2013)

Sources:
MPO website: http://www.wppdc.org/mpo.htm
Data retrieved: 1/5/2013
Supplemental data provided by: Aaron Burdick, MPO Administrator
Resources reviewed included: MPO webpage; MPO Bylaws; 2011 Public Participation Plan; FY 2010 Unified Planning Work Program; September 2012 Title VI Plan; 2025 Long Range Transportation Plan; Plan Summary Poster; Public Hearing Materials; Public viewing distribution locations document; Public notices

Phase I:

General MPO Information

MPO Name	Danville Metropolitan Planning Organization
Population	65,689
TMA/Non-TMA	Non-TMA
Member Jurisdictions	City of Danville; Pittsylvania County
Number of Voting Members	7 - Pittsylvania County (3), City of Danville (2), the City Manager of the City of Danville (1); the Virginia Department of Transportation (1)
Voting Structure: Equal/Weighted/Both	Equal - Each MPO member with voting rights shall have one equal vote in all matters brought before the MPO Policy Board.
Meeting Schedule:	As Needed
Meetings Open to Public:	Yes
Other Committees	MPO Technical Committee
Funding Year (UPWP)	July 1, 2009 – June 30, 2010

Public Participation Plan Date	March 15, 2007
MTP Adoption Date	August 16, 2010

Metropolitan Transportation Plan Public Participation Summary

MTP Development Timeline	July 2009 – August 2010
Public Involvement for MTP	• The citizen participation program followed the process and procedures of the Public Involvement Participation Plan and Notification Procedures Manual. Three informal Citizen Information meetings were held on July 22, 2009, March 30, 2010 and June 2, 2010. The first meeting focused on identifying issues and concerns, the second meeting presented improvement alternatives, and the third meeting presented the recommended alternative. All meetings were held at the Danville Regional Airport. • Notices of the meetings were published in the local newspaper, and posted on the MPO website. In addition, notice was posted on the City's public access cable channel. Direct notices were sent to targeted mailing lists of interested individuals and organizations. For example, individuals who had attended previous corridor study meetings received letters notifying them of the meetings. In addition, articles were published in the local newspaper describing the planning process, and detailing the purpose, location and schedule of the meetings. • Continuous coordination was provided through regular meetings of the Danville-Pittsylvania Metropolitan Planning Organization's (MPO) project management team. This team was established at the initiation of the process and included representatives of the City of Danville, Pittsylvania County, the West Piedmont Planning District Commission, the Virginia Department of Transportation, the Virginia Department of Rail and Public Transportation and the Federal Highway Administration. In addition, presentations of the recommended plan were provided the Danville City Council on June 1, 2010 and to the Pittsylvania County Board of Supervisors on June 7, 2010. A formal public hearing was held on June 22, 2010. Its purpose was to provide the public with the opportunity to comments prior to the

	adoption by the Metropolitan Planning Organization. Following review and consideration of the comments provided both at the citizen information meetings and at the public hearing, the Danville-Pittsylvania Area Long-Range Transportation Plan – Year 2035 was adopted by the Danville Metropolitan Planning Organization on August 16, 2010. (MTP Summary Poster)

Characteristics of Public Participation

Characteristic	Criteria	Description
Well Defined PPP	Goals in PPP?	No
	Objectives?	No
	Measures of Effectiveness	No
Funding Level:	Overall Budget	$375,336
	PP Budget	Public participation related tasks are listed under Task 2.0 (Long-Range Transportation Planning and Surveillance) in the UPWP. Related activities include support for maintenance of the 2030 plan and development of the 2035 plan, addressing SAFETEA-LU requirements, and other statewide planning activities. The total budget for Task 2.0 was $203,334. It is estimated that approximately $31,500 is budgeted for public participation activities.
	%	8.4% (Calculated)
Early and Continuous Participation	Was there public input during the following stages of Plan Development:	
	Was there Public Input when MTP was initiated?	Yes
	During the development of Alternatives?	Yes
	Review of Draft Plan?	Yes
	Before Final Plan Adoption?	Yes
Complete Information	Was all technical information made available to the public?	Yes
	Was technical information	Yes

	displayed using visualization techniques?	
	Was technical information verbally explained to the public?	Yes
Broad Outreach	Number of Techniques Used	1. Cable Access Television (meeting announcements) 2. Direct mail to citizens and interested parties 3. Email distribution List of citizens and interested parties 4. Hard Copy Document Availability for Review 5. Newspaper (Advertisements & Articles) 6. Open Public Comment Period 7. Press releases 8. Public Hearing 9. Public Information Meetings 10. Website
	Outreach to low-income and minority populations	Yes
	Geographic Diversity/Outgoing vs Incoming	No
	Info Available in multiple Languages	No
Responsiveness	Were specific comments noted and considered in the body or appendices or the MTP?	Yes
	Were responses provided to comments received?	Yes
	Was customer satisfaction captured or considered as a part of the MTP process?	No

Measurement of Characteristics of MPO Public Involvement

Characteristic	Measurement	Rating
Well Defined PPP:	Y/N	N
Funding Level:	Overall Budget	$375,336
	PP Budget	$31,500
	%	8.4%
	H/M/L	M
Early and Continuous Participation	Y/N	Y
Complete Information Provided	Y/N	Y
Broad Outreach	Y/N	N
Responsiveness	Y/N	Y

Public Participation Techniques Used, Level of Engagement, Deliberation

Technique Used	Phase of Plan Development:				Inform	Consult	Involve	Collaborate	Empower	Deliberation
	Initiation	Alternatives Development	Draft MTP	Final MTP						Y/N
Cable Access Television (meeting announcements)	X	X	X	X	X					N
Direct mail to citizens and interested parties	X	X	X	X	X					N
Email distribution List of citizens and interested parties	X	X	X	X	X					N
Hard Copy Document Availability for			X		X					

Review										
Newspaper (Advertisements & Articles)	X	X	X	X	X					N
Open Public Comment Period				X		X				N
Presentations to City Council (Boards)			X		X	X				N
Public Hearing				X						N
Public Information Meetings	X	X	X		X	X	X			N
Website	X	X	X	X	X					N

Phase II: Reflections of Public Input in MTP

Quantity of Participation

Technique	No. of Comments/Input Received from Public
Cable Access Television (meeting announcements)	N/A
Direct mail to citizens and interested parties	-
Email distribution List of citizens and interested parties	-
Hard Copy Document Availability for Review	-
Newspaper (Advertisements & Articles)	-
Open Public Comment Period	3
Presentations to City Council	-

(Boards)	
Public Hearing	3
Public Information Meetings	0
Website	-

Outputs of Participation

Input	Source of Input	Associated PP Technique	(Theme) Input Related to:	Frequency of Occurrences
			Modal Choice	
Maintain Crescent rail service and study light rail service from downtown to CyberPark	Summary of Verbal Comment	Open Comment Period	Rail service	1
More sidewalks, bike lanes and public transit	Summary of Verbal Comment	Open Comment Period	Pedestrian Bicycle Transit	1
			Project Recommendations	
Support limited access, four lane highway along Route 58; Support 4-lane, limited access highway to DC bypassing Charlottesville (i.e. Route 29) Widen Mount Cross Road	Email Email	Open Comment Period	Widen Route 58; Widen Route 29; Charlottesville Bypass; Mount Cross Road Widening	1
Franklin Turnpike Extension Project – Access Issue	Summary of Verbal Comment	Public Hearing	Specific project issue	1
Study West Main Street widening	Summary of Verbal Comment	Public Hearing	West Main St. widening	1

Address traffic concerns in the Mega Park area at Vandola Church Road and Oak Ridge Road	Summary of Verbal Comment	Public Hearing	Mega Park area traffic study	1

Metropolitan Transportation Plan Analysis

Collective Public Input	Input Reflected in Transportation Plan			Comments
	Negative Outcome	Inherent Outcome	Positive Outcome	
Widen Route 58 Widen Route 29 Widen Mount Cross Road		X		
Light Rail; Crescent Rail Service	X			
Pedestrian Facilities		X		
Bicycle Facilities		X		
Improve public transit service		X		
Widen West Main Street	X			
Mega Park Traffic Study		X		
Total	**2**	**5**	-	

Appendix K: Fredericksburg MPO

MPO Profile Public Participation Profile: MPO 6
Fredericksburg Area MPO
(Source of information captured in parentheses. Data retrieved from Internet website 1/9/2013)

Sources:
MPO website: http://www.fampo.gwregion.org/
Data retrieved: 1/9/2013
Supplemental data provided by: Mr. Lloyd Robinson, FAMPO Administrator and Mr. Andy Waple, Principal Planner
Resources reviewed included: MPO webpage; November 2012 Public Participation Plan; FAMPO Bylaws; FY 2009 Unified Planning Work Program; 2035 Long Range Transportation Plan; January 26, 2009 Meeting minutes.

Phase I:

General MPO Information

MPO Name	Fredericksburg Area Metropolitan Planning Organization
Population	275,639
TMA/Non-TMA	TMA
Member Jurisdictions	City of Fredericksburg, Spotsylvania County, Stafford County, Portions of Caroline and King George Counties
Number of Voting Members	12 - City of Fredericksburg (3), Spotsylvania County (3), Stafford County (3), Portions of Caroline and King George Counties; Potomac and Rappahannock Transportation Commission (1); Virginia Department of Rail and Public Transportation (1); Virginia Department of Transportation (1)
Voting Structure: Equal/Weighted/Both	Equal among voting members
Meeting Schedule:	Monthly
Meetings Open to Public:	Yes
Other Committees	FAMPO Technical Committee; Transportation (Citizens) Advisory Group; Bicycle and Pedestrian Committee; Special Committees as needed
Funding Year (UPWP)	July 1, 2008 – June 30, 2009
Public Participation Plan	November 19, 2012

Date	
MTP Adoption Date	January 26, 2009

Metropolitan Transportation Plan Public Participation Summary

MTP Development Timeline	The plan development process began in 2007 and concluded in January 2009. Public outreach began 6/23/08 and continued through 1/26/09
Public Involvement for MTP	• Multiple techniques were used by the MPO. The informal comment period began in October 2008 and the formal comment period began in November 2009. • Five public meetings were held in October 2008. A Public Hearing was held in December 2008. • As part of the solicitation of comments, questionnaires were distributed and collected and an online survey was administered. A Speakers Bureau was also used as part of the process.

Characteristics of Public Participation

Characteristic	**Criteria**	**Description**
Well Defined PPP	Goals in PPP?	Yes. Guidelines listed in the PPP are similar to goals included in the PPPs of other MPOs in this study.
	Objectives?	Yes
	Measures of Effectiveness	Yes
Funding Level:	Overall Budget	$614,604
	PP Budget	$90
	%	15%
Early and Continuous Participation	Was there public input during the following stages of Plan Development:	
	Was there Public Input when MTP was initiated?	No
	During the development of	No

	Alternatives?	
	Review of Draft Plan?	Yes. There was input on and initial draft plan and the final draft of the plan.
	Before Final Plan Adoption?	Yes
Complete Information	Was all technical information made available to the public?	Yes
	Was technical information displayed using visualization techniques?	Yes
	Was technical information verbally explained to the public?	Yes
Broad Outreach	Techniques Used	1. Cable Access Television 2. Direct mail to citizens and interested parties 3. Email to citizens and interested parties (distribution list) 4. Fliers 5. Hard Copy Document Availability 6. Newspaper Advertisements 7. Newspaper Interviews/Articles 8. Newspaper Insert 9. Open Public Comment Period 10. Presentations to City Council 11. Press releases 12. Public Hearing (during MPO meeting) 13. Public Information Meeting 14. Public Information Officer Outreach (local governments) 15. Radio advertisements 16. Speakers Bureau/Presentations to Community Groups 17. Survey (web-based and hand-out) 18. Websites
	Outreach to low-income and minority populations	Yes

	Geographic Diversity/Outgoing vs Incoming	Yes
	Info Available in multiple Languages	Yes
Responsiveness	Were specific comments noted and considered in the body or appendices or the MTP?	Yes
	Were responses provided to comments received?	Yes
	Was customer satisfaction captured or considered as a part of the MTP process?	Yes

Measurement of Characteristics of MPO Public Involvement

Characteristic	Measurement	Rating
Well Defined PPP:	Y/N	Y
Funding Level:	Overall Budget	$614,604
	PP Budget	$90
	%	15%
	Y/N	H
Early and Continuous Participation	Y/N	N
Complete Information Provided	Y/N	Y
Broad Outreach	Y/N	Y
Responsiveness	Y/N	Y

Public Participation Techniques Used, Level of Engagement, Deliberation

Technique Used	Phase of Plan Development:				Inform	Consult	Involve	Collaborate	Empower	Deliberation
	Initiation	Alternatives Development	Draft* MTP	Final MTP						Y/N
Cable Access Television			X		X					N
Direct mail to citizens and interested parties			X	X	X					N
Email to citizens and interested parties (distribution list) Fliers			X	X	X					N
Hard Copy Document Availability			X		X					N
Newspaper Advertisements			X	X	X					N
Newspaper Interviews/Articles			X	X	X					N
Newspaper Insert				X	X					N
Open Public Comment Period			X			X				N
Presentations to City Council			X		X	X				N
Press releases			X	X	X					N
Public Hearing (during MPO meeting)			X	X	X	X				N
Public Information			X		X	X				N

Meeting										
Public Information Officer Outreach (local governments)			X	X	X					N
Radio advertisements			X	X	X					N
Speakers Bureau/Presentations to Community Groups			X	X	X	X	X			Y
Survey (web-based)			X	X		X				N
Websites			X	X	X	X				N

*For initial and final drafts of the plan.

Phase II: Reflections of Public Input in MTP

Quantity of Participation

Technique	No. of Comments/Input Received
Cable Access Television	-
Direct mail to citizens and interested parties	-
Email to citizens and interested parties (distribution list)	-
Fliers	-
Hard Copy Document Availability	-
Newspaper Advertisements	-
Newspaper Interviews/Articles	-

Newspaper Insert	-
Open Public Comment Period	3
Presentations to City Council	-
Press releases	-
Public Hearings (during MPO meeting)	6
Public Information Meeting	Unknown
Public Information Officer Outreach (local governments)	-
Radio advertisements	-
Speakers Bureau/Presentations to Community Groups	At least 1
Survey (web-based and hand-out)	56
Websites	-

Outputs of Participation

Input	Source of Input	Associated PP Technique	(Theme) Input Related to:	Frequency of Occurrence
			Goals	
Support of "Option 3" of the 2035 Long Range Plan: Changing land use plans to help alleviate congestions	Letter via Email	Open Comment Period	Integrated land use and transportation planning	1
Transportation should be used to guide desirable land use.	Summary of Verbal Comment	Public Hearing at MPO Meeting	Integrated land use and transportation planning	1
Support the adoption of the Plan and the plan should be a living document. Multimodal	Summary of Verbal Comment	Public Hearing	Support multimodal transportation.	1

transportation is more and more important. Consider how we transition from one mode to another. Consider bike parking.				
Scenario 3 - Identify and Secure Additional Transportation Funding AND Adapt Regional Growth Policies - The region's transportation issues are closely intertwined with its land development policies. Regionally guide growth to areas where growth creates nodes of activity that are supportive of travel choice.	Survey Results	Survey (web-based and handout)	Adapt Regional Growth Policies	82.6%
Tie development to transportation; Promote energy conservation thru improved land use & efficient movement within the various systems/modes	Survey Results	Survey (web-based and handout)	Integrated land use and transportation planning	Top 3 Priorities Q7
			Modal Choices	
Support the adoption of the Plan and the plan should be a living document. Multimodal transportation is more and more important. Consider how we transition from one mode to another. Consider bike parking.	Summary of Verbal Comment	Public Hearing	. Bicycle Infrastructure.	1

Strongly advocate having walk able neighborhoods/commercial and additional sidewalks /crosswalks as a very top priority.	Summary of Verbal Comment	Public Hearing	Support Walkable Communities	1
In favor of small, fractions on the Plan, for example, Scenario 3. Provide transit to the Urban Developed Areas (UDA). Don't provide transit to any other areas in Spotsylvania County, but just to the UDA's. We should not make transit convenient to people outside the Urban Areas. No road projects that do not link UDAs. Concentrate on transit for the USA's. Once transit is in place then we should provide congestion pricing to make sure the roads are cleared up so transit will flow smoothly. It may be political suicide now, but it is the right thing to do.	Summary of Verbal Comment; Email	Public Hearing; Open Comment Period	Support of transit in Urban Development Areas.	2
Expanded Bus/Transit Service as the most important for consideration in the 2035 LRTP.	Survey Results	Survey (web-based and handout)	Increase/Improve Transit Service in the region	Scored 4.3 out of 5 Q5; 19 mentions Q4
Congestion relief on major highways	Survey Results	Survey (web-based and handout)	Reduce Traffic Congestion	Scored 4.3 out of 5 Q5

Expanded passenger rail	Survey Results	Survey (web-based and handout)	Expand Passenger Rail	Scored 4.3 out of 5 Q5; Top Priority Q7
Improve bicycle and pedestrian accommodations	Survey Results	Survey (web-based and handout)	Improve/Increase bicycle and pedestrian infrastructure	4.1 out of 5 ;10 mentions Q5; Top Priority Q7
Invest in local and regional public transit. Return to pedestrian oriented communities & public transit; More public transportation, less dependence on individual cars;	Survey Results	Survey (web-based and handout)	Increase/Improve Transit Service in the region	Top 3 Priorities Q7
Remove existing barriers to walking and biking; Self-motivated transportation, walking, biking; Bike paths	Survey Results	Survey (web-based and handout)	Improve/Increase bicycle and pedestrian infrastructure	Top 3 Priorities Q7
			Project Recommendations	
Restore functionality to I-95; Congestion on interstate 95 and feeder roads; Widening I-95 to 8 lanes & addition of HOV; 95 corridor Congestion; Create HOV lanes to Fredericksburg at least	Survey Results	Survey (web-based and handout)	Improve i-95 to add capacity and HOV Lanes	Top Priority Q7
People who want to solo commute at rush hour should pay more.	Survey Results	Survey (web-based and handout)	Institute congestion pricing	Top 3 Priorities Q7

Remove the bottle neck at Butler Road and Route 1	Survey Results	Survey (web-based and handout)	Butler Road and Route 1	Top 3 Priorities Q7
Improve options for commuters to DC; Expanded rail service for commuters	Survey Results	Survey (web-based and handout)	Increase commuting options	Top 3 Priorities Q7
			Funding Recommendations	
He would like to go on record in one area that it makes absolutely no sense to have a mandatory cost increase and not a corresponding increase in the revenue sources.	Summary of Verbal Comment	Public Hearing	Increase revenue sources	1
Scenario 3 - Identify and Secure Additional Transportation Funding AND Adapt Regional Growth Policies - The region's transportation issues are closely intertwined with its land development policies. Regionally guide growth to areas where growth creates nodes of activity that are supportive of travel choice.	Survey Results	Survey (web-based and handout)	Identify and secure additional transportation funding	82.6%
			Other	

Explain the difference between the needs plan and the constrained plan. Show both plans on a map and use the same technique to show comparative congestions levels. Show how congestion would change in different growth scenarios.	Email	Website	Provide more detail on "Constrained" plan versus "Needs" plan.	1
Same as above			Include Scenario Planning	1
An email was received that included a line by line review of the document with specific questions about the documents. A four page response was provided answering each question and identifying changes that would be made in the final document	Email	Website	Specific section by section changes regarding various sections of the Plan including Level of Service, transit ridership, including more funding information for projects.	1
Express appreciation for all the outreach by the staff of FAMPO in the development of the plan. FAMPO met with them several times and inputs and revisions were made to the plan based on their comments. (On behalf of the Rappahannock Disabilities Network)	Summary of Verbal Comment	Public Hearing; Speakers Bureau/Presentations to Community Groups	Support needs of the Disabled.	1

Note: "Q" refers to the questions on the survey

Metropolitan Transportation Plan Analysis

Collective Public Input	Input Reflected in Transportation Plan	Comments

	Negative Outcome	Inherent Outcome	Positive Outcome	
Support Scenario 3: Identify and Secure Additional Transportation Funding AND Adapt Regional Growth Policies		X		
Reduce congestion and improve system operations		X		
Improve Commuter Rail Service		X		
Improve/Increase bicycle and pedestrian infrastructure		X		
Institute congestion pricing on I-95		X		
Improve Butler Road and Route 1		X		
Improve I-95 (widen, HOV, Improve functionality)		X		
Increase commuting options		X		
Support needs of the Disabled			X	
Specific section by section changes regarding various sections of the Plan including Level of Service, transit ridership, including more funding information for projects.			X	
Total	**0**	**8**	**2**	

Appendix L: Hampton Roads MPO

MPO Profile Public Participation Profile: MPO 7
Hampton Roads Area MPO

Sources:
MPO website: http://www.hrtpo.org/
Data retrieved: 1/9/2013
Supplemental data provided by: Ms. Kendall Miller, Public Involvement and Title VI Administrator
Resources reviewed included: MPO webpage; MPO Bylaws; December 2009 Public Participation Plan; January 2013 Public Participation Plan; FY 2012 Unified Planning Work Program; 2034 Long Range Transportation Plan and Public Involvement Appendix; January 2012 MPO Meeting minutes; Christopher Newport University Focus Group Report; School Outreach Presentation; Prioritization Report.

Phase I:

General MPO Information

MPO Name	Hampton Roads Transportation Planning Organization
Population	1,618,505
TMA/Non-TMA	TMA
Member Jurisdictions	Chesapeake, Gloucester County, Hampton, Isle of Wight County, James City County, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, Williamsburg, York County
Number of Voting Members	22 - City of Chesapeake (1), Gloucester County (1), City of Hampton (1), Isle of Wight County (1), James City County (1), City of Newport News (1), City of Norfolk (1), City of Poquoson (1), City of Portsmouth (1), City of Suffolk (1), City of Virginia Beach (1), City of Williamsburg (1), York County (1), Williamsburg Area Transit Authority (1), Transportation District Commission of Hampton Roads (1), Virginia Department of Transportation (1), Virginia Department of Rail and Public Transportation (1), Virginia Port Authority (1), Virginia House of Delegates (2), Virginia Senate (2)
Voting Structure: Equal/Weighted/Both	Equal voting

Meeting Schedule:	Regular meetings of the TPO Board shall be held 10:30 a.m. to 12:30 p.m. on the 3rd Thursday of each month
Meetings Open to Public:	Yes
Other Committees	The standing committees of the TPO Board shall be: the Transportation Technical Advisory Committee, the Transportation Advisory Committee, the Citizen Transportation Advisory Committee, and the Freight Transportation Advisory Committee.
Funding Year (UPWP)	FY 2011-2012
Public Participation Plan Date	December 2009; updated January 2013
MTP Adoption Date	January 2012

Metropolitan Transportation Plan Public Participation Summary

MTP Development Timeline	Plan Development began in May 2008 and concluded January 1012
Public Involvement for MTP	LRTP public participation objectives include: • Providing broad-based access to the LRTP planning process • Developing and disseminating information about the long-range transportation planning process through multiple sources, with clear, non-technical language • Engaging all aspects of the public, including minority, low-income, disabled, and elderly persons in a meaningful exchange of ideas related to the transportation planning process • Establishing working relationships with partner and peer organizations in the region with the purpose of information exchange, resource sharing, and regional dialogue. The development of the 2034 LRTP was a transparent process in which HRTPO staff provided broad-based access to all LRTP related material. This included utilizing the World Wide Web, direct and electronic mail, providing public comment opportunities and draft versions of the LRTP in regional libraries, conducting outreach and partnering with community organizations and existing events, as well as holding public meetings, community events, and dialogues across the region to share information and gain public input on the LRTP.

	As indicated in the HRTPO Public Participation Plan, the following strategies were available and utilized for engaging the public in the development of the LRTP, including: • Identifying current Environmental Justice and other traditionally underrepresented populations within Hampton Roads to ensure these communities are involved. • Maintaining a webpage dedicated to the development of the LRTP. Users will be able to access LRTP information, progress, and opportunities to become involved. The HRTPO website will be utilized to advertise upcoming meetings and public participation activities. • Holding public meetings/Open Houses related to the LRTP. • Conducting surveys and polls to solicit public input. This can be done via the internet, telephone surveys, or portable, recently improved, computer kiosks to facilitate participation by all interested groups. • Establishing partnerships with regional organizations and agencies to both disseminate information and encourage input from their members. • Engaging community groups via "Community Conversations" by providing the opportunity for HRTPO staff to appear before local community groups. This effort includes the School Outreach program. • Communicating LRTP updates and information via the HRTPO Board, Advisory (i.e. TTAC, FTAC. CTAC), and Subcommittee meetings (i.e. LRTP Subcommittee). These meetings also provide public participation opportunities, as members of the public are allotted time at the start of each of these meetings to speak. In addition, Board members can share information with their community members. • Including articles relating to the development of the LRTP in the HRTPO newsletter/e-newsletter. • Using Facebook to disseminate information regarding upcoming public participation opportunities and development of the LRTP. The plan was developed in four phases: Phase One: This phase is dedicated to establishing the vision and goals of the LRTP and includes the following tasks: • Review federal, state, and local public involvement requirements • Develop a public involvement plan for the 2034 LRTP

	• Develop a database of stakeholders and interested parties • Conduct spatial analysis of EJ communities • Branding of the LRTP (design logo, webpage, and marketing pieces) • Solicit public input regarding regional priorities and concerns via a survey and focus groups Phase Two: This phase is dedicated to collecting candidate transportation projects for the LRTP and includes the following tasks: • Collect candidate projects from stakeholders, including citizens • Review candidate projects with the LRTP subcommittee • Collect data for candidate projects Phase Three: This phase is dedicated to alternative analysis for the LRTP. The Project Prioritization Tool was used to analyze and evaluate projects for the LRTP. This phase includes the following tasks: • Solicit HRTPO Board, HRTPO Advisory and Subcommittees, regional stakeholder, and public input regarding prioritization criteria and weighting factors • Finalize methodology for Project Prioritization Tool • Hold public meetings regarding Project Prioritization results Phase Four: This phase is dedicated to the adoption of the LRTP, including the list of projects and studies in the plan as well as the report documenting the LRTP planning process. This phase includes soliciting the HRTPO Board, HRTPO Advisory Committees and Subcommittees, regional stakeholders, and public input regarding the following items: • Projects and studies in the LRTP • Air Quality Conformity results • LRTP report and marketing pieces

Characteristics of Public Participation

Characteristic	Criteria	Description
Well Defined PPP	Goals in PPP?	Yes
	Objectives?	Yes
	Measures of Effectiveness	Yes

Funding Level:	Overall Budget	$11,931,274
	PP Budget	$434,460
	%	3.6% (Calculated)
Early and Continuous Participation	Was there public input during the following stages of Plan Development:	
	Was there Public Input when MTP was initiated?	Yes
	During the development of Alternatives?	Yes
	Review of Draft Plan?	Yes
	Before Final Plan Adoption?	Yes
Complete Information	Was all technical information made available to the public?	Yes
	Was technical information displayed using visualization techniques?	Yes
	Was technical information verbally explained to the public?	Yes
Broad Outreach	Techniques Used	1. Citizens Advisory Committee 2. Direct mail to citizens and interested parties 3. Email to citizens and interested parties (distribution list) 4. Fliers 5. Focus Groups 6. Hard Copy Document Availability for Review 7. Kiosk(s) 8. Newsletter 9. Newspaper Advertisements 10. Open Public Comment Periods (Prioritization and Draft Plan) 11. Piggy-back on other events 12. Public comment during MPO meeting 13. Public Information Meeting

		14. School Outreach 15. Social Media (Facebook, You Tube) 16. Speakers Bureau (Community Conversations) 17. Survey (various) 18. Webcast (You Tube) 19. Website (including visualization tool)
	Outreach to low-income and minority populations	Yes
	Geographic Diversity/Outgoing vs Incoming	Yes
	Info Available in multiple Languages	Yes
Responsiveness	Were specific comments noted and considered in the body or appendices or the MTP?	Yes
	Were responses provided to comments received?	Yes
	Was customer satisfaction captured or considered as a part of the MTP process?	Yes

Measurement of Characteristics of MPO Public Involvement

Characteristic	Measurement	Rating
Well Defined PPP:	Y/N	Y
Funding Level:	Overall Budget	$11,931,274
	PP Budget	$434,460
	%	3.6%
	H/M/L	L

Early and Continuous Participation	Y/N	Y
Complete Information Provided	Y/N	Y
Broad Outreach	Y/N	Y
Responsiveness	Y/N	Y

Public Participation Techniques Used, Level of Engagement, Deliberation

Technique Used	Phase of Plan Development:				Inform	Consult	Involve	Collaborate	Empower	Deliberation
	Initiation	Alternatives Development	Draft MTP	Final MTP						Y/N
Citizens Advisory Committee		X	X		X	X	X	X		Y
Direct mail to citizens and interested parties	X				X					N
Email to citizens and interested parties (distribution list)	X				X					N
Fliers	X				X					N
Focus Groups	X	X			X	X	X			N
Hard Copy Document Availability for Review			X		X					
Kiosk(s)	X					X				N
Newsletter	X	X	X	X	X					N
Newspaper Advertisements										N
Open Public Comment Period		X	X			X				N

(Prioritization and Draft Plan)										
Piggy-back on other events	X				X					N
Public comment during MPO meeting	X	X	X	X	X	X				N
Public Information Meeting	X		X	X	X	X	X	X		N
School Outreach		X			X					N
Social Media (Facebook, You Tube, Blog)	X	X	X	X	X					N
Speakers Bureau (Community Conversations)		X	X	X	X	X				N
Surveys	X	X				X	X	X		N
Webcast (You Tube)	X	X	X	X	X	X				N
Website (including visualization tool)	X	X	X	X	X	X				N

Phase II: Reflections of Public Input in MTP

Quantity of Participation

Technique	No. of Comments/Input Received
Citizens Advisory Committee	Membership Varies
Direct mail to citizens and interested parties	-
Email to citizens and interested parties (distribution list)	-

Fliers	-
Focus Groups	6 focus groups; highest consensus on 6 objectives for regional transportation
Hard Copy Document Availability for Review	-
Kiosk(s)	Unavailable
Newsletter	-
Newspaper Advertisements	-
Open Public Comment Period (Prioritization and Draft Plan)	97
Piggy-back on other events	-
Public comment during MPO meeting	0
Public Information Meeting	Unavailable
School Outreach	School Projects
Social Media (Facebook, You Tube, Blog)	-
Speakers Bureau (Community Conversations)	-
Surveys	700
Webcast (You Tube)	-
Website (including visualization tool)	-

Outputs of Participation

Input	Source of Input	Associated PP Technique	(Theme) Input Related to:	Frequency of Occurrence
			Goal	
Improve transportation infrastructure and reduce highway congestion	Survey Results	Survey	Reduce highway congestion	Q 1: 64%; Q 8: 21%

Develop in downtown core areas and established neighborhoods; Mixed use development; Live in close proximity to jobs and shopping; Coordination with Land Use	Survey Results	Survey	Improve the integration of transportation and land use	Q 2 & 3: 3+ on scale of 4; Q 4: 42%; Q 7: 45%; Open ended: 28; 58; 33; 48;
Improve system operations; traffic flow	Survey Results	Survey	Improve system operations	Q 6: 55%; Open ended: 27; 27
Increase Accessibility /mobility /connectivity	Survey Results	Survey	Improve the integration of transportation and land use	Open ended: 62; 111; 95; 28
Improve safety and Security associated with the operation of the transportation system; evacuation routes	Survey results	Survey	Improve safety and Security of the transportation system	Open ended: 7; 19
Regionalism	Survey results	Survey	Regionalism	Open ended: 33;124
Protect the Environment	email	Website/Open Public Comment Period	Protect the Environment	6
Maintain the existing system; Repair/Upgrade current roads	Email; Focus Group	Website/Open Public Comment Period; Focus Group Report	Maintain the existing system	9; Focus Group
Reduce Greenhouse gas emissions	email	Website/Open Public Comment Period	Improve Air Quality	2
			Modal Choices	
Improve transit and public transportation options	Survey Results	Survey	Improve transit and public transportation options	Q 5: 32%; Q 6: 55%; Open Ended: 9; 62
Increasing the frequency, reliability and availability of passenger rail service	Survey results	Survey	Increasing the frequency, reliability and availability of passenger rail service	Q 5: 30%
Increasing the frequency,	email	Website/Open	Increasing the frequency, reliability and	2

reliability and availability of passenger rail service		Public Comment Period	availability of passenger rail service	
Support transportation demand management strategies (i.e. Park and Ride facilities (Transportation Centers), carpool/vanpool, alternate commuting strategies)	email	Website/Open Public Comment Period	Support transportation demand management strategies	15
			Project Recommendations	
List of projects submitted by the public during call for candidate projects	Survey results	Survey	Various	600+ statements were submitted for candidate projects and programs
Integrated regional light rail network:	Focus Group Report	Focus Group Report	Regional Light Rail	Focus Group
Express Bus	email	Website/Open Public Comment Period	Express Bus	1
High Speed Rail; High Speed Amtrak	Email; Focus Group	Website/Open Public Comment Period; Focus Group Report	High Speed Rail	1; Focus Group
List overall ranking of projects in all categories (SELC)	email	Website/Open Public Comment Period	List overall ranking of projects in all categories (SELC)	1
Extend Mooretown Road from Lightfoot to the Croaker Road intersection	email	Website/Open Public Comment Period	Extend Mooretown Road from Lightfoot to the Croaker Road intersection	2
Include passenger rail projects	email	Website/Open Public Comment Period	Include passenger rail projects	1
I-64 widening; widen from 295 to Newport news	Email; Focus	Website/Open Public Comment	I-64 widening; widen from 295 to Newport news	1; Focus Group

	Group	Period		
Expand HRBT; Increase Capacity	Email; Focus Group	Website/Open Public Comment Period	Expand HRBT	1; Focus Group
Rt 60 Skiffes Creek Connector	email	Website/Open Public Comment Period	Rt 60 Skiffes Creek Connector	1
Hampton Roads Third Crossing	email	Website/Open Public Comment Period	Hampton Roads Third Crossing	47
Oppose construction of Route 460 Improvements	email	Website/Open Public Comment Period	Oppose construction of Route 460 Improvements	47
Remove the SE Parkway from the plan	email	Website/Open Public Comment Period	Remove the SE Parkway from the plan	1
Include all elements of Phase II the regional transit vision plan; Improve Transit	email	Website/Open Public Comment Period	Include all elements of Phase II the regional transit vision plan	1
Various suggested changes to the document from Mr. Ray Taylor (included)	email	Website/Open Public Comment Period	Various suggested changes to the document from Mr. Ray Taylor (included)	1
Various suggested changes to the document from Mr. Timothy Cross (included)	email	Website/Open Public Comment Period	Various suggested changes to the document from Mr. Timothy Cross (included)	1
Various Comments from the SELC (removal of 460 recommendations is not reflected in the plan; other recommendations addressed through planning process)	email	Website/Open Public Comment Period	Various Comments from the SELC (removal of 460 recommendations is not reflected in the plan; other recommendations addressed through planning process)	1
Route 17 on Peninsula	Focus Group	Focus Group Report	Improve Route 17 on Peninsula	Focus Group

Patriots Crossing	email	Website/Open Public Comment Period	Patriots Crossing	1
Inclusion of projects in Gloucester County	email	Website/Open Public Comment Period	Inclusion of projects in Gloucester County	1
Coliseum Central and Warwick Blvd	Focus Group	Focus Group Report	Improve Coliseum Central and Warwick Blvd	Focus Group
Downtown Tunnel	Focus Group	Focus Group Report	Improve Downtown Tunnel	Focus Group
Midtown Tunnel	Focus Group	Focus Group Report	Improve Midtown Tunnel	Focus Group
Indian River Road	Focus Group	Focus Group Report	Improve Indian River Road	Focus Group
Indian River Road and Independence Intersection	Focus Group	Focus Group Report	Improve Indian River Road and Independence Intersection	Focus Group
Elbow Road	Focus Group	Focus Group Report	Improve Elbow Road	Focus Group
Shore Drive	Focus Group	Focus Group Report	Improve Shore Drive	Focus Group

Metropolitan Transportation Plan Analysis

Collective Public Input	Input Reflected in Transportation Plan			Comments
	Negative Outcome	Inherent Outcome	Positive Outcome	
Maintain the existing system		X		
Improve Infrastructure and Reduce highway congestion		X		
Improve safety and Security of the transportation system		X		
Improve system operations		X		
Support transportation demand management strategies		X		

Improve transit and public transportation options		X		
Increasing the frequency, reliability and availability of passenger rail service; Include passenger Rail projects		X		
Improve the integration of transportation and land use		X		
Regionalism			X	
Protect the Environment		X		
Extend Mooretown Road from Lightfoot to the Croaker Road intersection		X		
High Speed Rail			X	
I-64 widening on the Peninsula			X	
Rt 60 Skiffes Creek Connector		X		
Hampton Roads Third Crossing; Patriots Crossing; Widen Hampton Roads Bridge Tunnel			X	
Improve Route 17 on the Peninsula			X	
Improve Coliseum Central and Warwick Blvd	X			
Improve the Downtown/Midtown Tunnel			X	
Improve Indian River Road			X	
Improve Indian River/Independence Intersection	X			
Improve Elbow Road			X	
Improve Shore Drive			X	
Oppose construction of Route 460 Improvements	X			
Remove the SE Parkway from the plan	X			
Phase II the regional transit vision plan; improve transit		X		
Various suggested changes to the document from Mr. Ray Taylor (included)			X	
Various suggested changes to the document from Mr. Timothy Cross (included)			X	
Various Comments from the SELC (removal of 460 recommendations is not reflected in the plan; other recommendations addressed through planning process)	X			
Inclusion of projects in Gloucester County		X*		*Considered in earlier alternatives but not included in

				the plan
List overall ranking of projects in all categories (SELC) rather only listing projects separately			X	
Total	**5**	**13**	**12**	

Appendix M: Harrisonburg-Rockingham MPO

MPO Profile Public Participation Profile: MPO 8
Harrisonburg-Rockingham MPO

Sources:
MPO website: http://www.hrvampo.org/MPO-Web/DesktopDefault.aspx
Data retrieved: 1/12/2013
Supplemental Data provided by: Ms. Bonnie Riedesel, HRMPO Administrator
Resources reviewed included: MPO webpage; MPO Bylaws; MPO Overview Power Point Document; 2007 Public Participation Plan; Title VI Plan; 2012-13 Unified Planning Work Program; 2035 Long Range Plan; March 2012 Meeting minutes.

Phase I:

General MPO Information

MPO Name	Harrisonburg-Rockingham MPO
Population	74,365
TMA/Non-TMA	Non-TMA
Member Jurisdictions	City of Harrisonburg, Rockingham County, Town of Bridgewater, Town of Dayton, Town of Mt. Crawford
Number of Voting Members	12 - City of Harrisonburg (5); Rockingham County (3); Town of Bridgewater (1); Town of Dayton (1); Town of Mt. Crawford (1); VDOT (1)
Voting Structure: Equal/Weighted/Both	Each HRMPO Policy Board voting representative or alternate shall have one (1) equal vote in all matters before the HRMPO
Meeting Schedule:	The MPO meets every other month, six times a year on the 3rd Thursday, January – November.
Meetings Open to Public:	Yes
Other Committees	Technical Advisory Committee; Long Range Plan Citizen Advisory Committee
Funding Year (UPWP)	FY 2012-2013
Public Participation Plan Date	July 19, 2007
MTP Adoption Date	March 15, 2012

Metropolitan Transportation Plan Public Participation Summary

MTP Development Timeline	Discussions for the development of the 2035 plan began in the latter portion of 2010. Public Involvement was conducted June 2011 – March 2012. The plan was adopted in March of 2012.
Public Involvement for MTP	• Multiple Meetings were held with the Technical Advisory Committee, the Policy Board and with other stakeholders from local universities. All meetings for the Technical Advisory Committee and the Policy Board are open to the public and are advertised in local, regional and Spanish-language newspapers. Additionally, all meeting notices were posted on the HRMPO website at least seven days prior to the meeting and, in most cases, 21 days prior to the meeting. • Meetings were held with each locality concerning data included in the 2035 Long Range Transportation Plan. In some cases, as needed, several meetings were held with individual localities to ensure the information within the 2035 Long Range Transportation Plan best represented individual locality needs and priorities. • A public information meeting was held on January 19, 2012, to present the Vision Plan, preliminary project prioritization and to gather public input on Long Range Transportation Plan projects. For each public information meeting, the materials presented at the meeting were made available on the web as well as at the offices of the Central Shenandoah Planning District Commission (CSPDC). The meetings were advertised in local, regional and Spanish-language newspapers. • The draft 2035 Long Range Transportation Plan was released for public review and comment from June 16, 2011, October 20, 2011 to January 19, 2012. Copies of the draft 2035 Long Range Transportation Plan were distributed to the following locations: - Rockingham County Department of Community Development, 20 East Gay Street, Harrisonburg, VA 22802; - City of Harrisonburg Public Works Department, 320 East Mosby Road, Harrisonburg, VA 22801; - City of Harrisonburg City Manager's Office, 345 S. Main St., Harrisonburg, VA 22801; - Town of Bridgewater Town Office, 201 Green Street, Bridgewater, VA 22812;

	- Town of Dayton Town Office, 125-B Eastview Street, Dayton, VA 22821; - Massanutten Regional Public Library, 174 S. Main St., Harrisonburg, VA 22801; and - Central Shenandoah Planning District Commission Office, 112 MacTanly Place, Staunton, VA 24401.

Characteristics of Public Participation

Characteristic	**Criteria**	**Description**
Well Defined PPP	Goals in PPP?	Yes
	Objectives?	Yes
	Measures of Effectiveness	Yes
Funding Level:	Overall Budget	$370,445
	PP Budget	Public participation is included as 1 of 10 tasks listed as a part of "Program Support and Administration". A total of $86,019 is budgeted for Program Support and Administration. As part of that, it is estimated that approximately $8,600 is budgeted for public participation activities.
	%	Approximately 2.3%
Early and Continuous Participation	Was there public input during the following stages of Plan Development:	
	Was there Public Input when MTP was initiated?	No. Meetings were held with MPO and TAC but there were no specific public involvement activities when the MTP was initiated
	During the development of Alternatives?	No. Alternatives were refined during review of draft plan but there was not public input prior to release of the draft plan.
	Review of Draft Plan?	Yes
	Before Final Plan Adoption?	Yes
Complete Information	Was all technical information made available to the public?	Yes
	Was technical information displayed using visualization techniques?	Yes
	Was technical information	No

	verbally explained to the public?	
Broad Outreach	Techniques Used	1. Hard Copy Document Availability 2. Newspaper Advertisements 3. Open Public Comment Period 4. Public Information meetings (worksheets, map exercises, comment forms) 5. Website
	Outreach to low-income and minority populations	Yes
	Geographic Diversity/Outgoing vs Incoming	No
	Info Available in multiple Languages	Yes
Responsiveness	Were specific comments noted and considered in the body or appendices or the MTP?	Yes
	Were responses provided to comments received?	No
	Was customer satisfaction captured or considered as a part of the MTP process?	No

Measurement of Characteristics of MPO Public Involvement

Characteristic	Measurement	Rating
Well Defined PPP:	Y/N	Y
Funding Level:	Overall Budget	$370,445 (UPWP)
	PP Budget	$8,600 (calculated)
	%	2.3%

	H/M/L	L
Early and Continuous Participation	Y/N	N
Complete Information Provided	Y/N	N
Broad Outreach	Y/N	N
Responsiveness	Y/N	N

Public Participation Techniques Used, Level of Engagement, Deliberation

Technique Used	Phase of Plan Development:				Inform	Consult	Involve	Collaborate	Empower	Deliberation
	Initiation	Alternatives Development	Draft MTP	Final MTP						Y/N
Hard Copy Document Availability			X	X	X					N
Newspaper Advertisements			X	X	X					N
Open Public Comment Period										
Public Information Meetings (worksheets, map exercises, comment forms)			X	X	X	X				N
Website			X	X	X	X				N

Phase II: Reflections of Public Input in MTP

Quantity of Participation

Technique	No. of Comments/Input Received
Hard Copy Document Availability	-
Newspaper Advertisements	-
Open Public Comment Period	21
Public Information Meetings (worksheets, map exercises, comment forms)	6
Website	-

Outputs of Participation

Input	Source of Input	Associated PP Technique	(Theme) Input Related to:	Frequency of Occurrence
			Project Recommendations	
Opposed to the I-81 loop road proposal around Harrisonburg. Eliminate any and all segments for a Harrisonburg bypass (segments 22A, 22B, 26, 81A and 81B) and projects in the Dayton area (segments 21, 39, and 77B); Opposed to the Harrisonburg Bypass	email	Open Public Comment Period	Remove I-81 Loop Projects	21
Remove 4 lane expansion of Eberly Road project; include intersection improvement at Eberly and Silver lake Road; Oppose Meigs Lane Connector extension to Kaylor Park	Comment Form	Public Information Meeting	Remove projects 77B, 27. Include an intersection improvement at Eberly and Silver lake Road	1

Drive; Oppose Route 257 South Extension (Bridgewater Eastern Bypass)				
Opposed to the Harrisonburg Bypass	Comment Form	Public Information Meeting	Remove Harrisonburg Bypass Projects	4
Several Recommendations from the Community Alliance for Preservation	Letter	Open Comment Period	Remove Harrisonburg Bypass Project	1
			Other	
Several Recommendations from the Community Alliance for Preservation	Letter	Open Comment Period	Revise the Plan development process to include earlier involvement and land use scenario planning	1

Metropolitan Transportation Plan Analysis

Collective Public Input	Input Reflected in Transportation Plan			Comments
	Negative Outcome	Inherent Outcome	Positive Outcome	
Remove I-81 Loop Projects in Harrisonburg (segments 22A, 22B, 26, 81A and 81B) and projects in the Dayton area (segments 21, 39, and 77B)	X			
Remove 4 lane expansion of Eberly Road project (77B)	X			
Include intersection improvement at Eberly and Silver lake Road	X			
Oppose Route 257 South Extension (Bridgewater Eastern Bypass) (27)	X			
Total	**4**	**-**	**-**	

Appendix N: Kingsport MPO

MPO Profile Public Participation Profile: MPO 9
Kingsport MPO

Sources:
MPO website: http://mtpo.kingsporttn.gov/
Data retrieved: 1/12/2013
Resources reviewed included: MPO webpage; MPO Prospectus and Bylaws; 2007 Public Participation Plan; FY 2012 Unified Planning Work Program; 2035 Long Range Transportation Plan.

Phase I:

General MPO Information

MPO Name	Kingsport MPO
Population	125,260
TMA/Non-TMA	Non-TMA
Member Jurisdictions	Kingsport, Mt Carmel, Church Hill, Weber City, Gate City, and portions of Sullivan County, Hawkins County, Washington County, and Scott County, VA. (Majority of the MPO in Tennessee)
Number of Voting Members	6 – Representative of the Governor of Tennessee (1); Representative of the Governor of Virginia (VDOT) (1); Mayor of the City of Kingsport (1); Mayor of Sullivan County (1); Tennessee Office of Local Planning Assistance Director (representing: City of Church Hill, City of Mount Carmel, Hawkins County, Washington County, and all areas of Tennessee outside of City of Kingsport and Sullivan County in Kingsport Urbanized Area) (1); LENOWISCO Planning District Commission Executive Director (Representing Scott County, Weber City, Gate City, and all areas of Virginia in Kingsport Urbanized Area) (1)
Voting Structure: Equal/Weighted/Both	Equal (nothing in Bylaws indicating otherwise)
Meeting Schedule:	As needed – on average, quarterly
Meetings Open to Public:	Yes
Other Committees	Technical Coordinating Committee

Funding Year (UPWP)	FY 2011 – 2012
Public Participation Plan Date	September 25, 2007
MTP Adoption Date	June 7, 2012

Metropolitan Transportation Plan Public Participation Summary

MTP Development Timeline	The development of the 2035 Long Range Plan began in August of 2010. The plan was adopted in June 2012. Public Involvement began June 2011.
Public Involvement for MTP	• The public and stakeholder involvement process of the 2035 LRTP consisted of a variety of communication and outreach means. The primary means of involvement largely consisted of public and stakeholder meetings and presentations, the use of an online survey and project website, and media outreach. • On June 9, 2011, a public meeting was held at the Kingsport Public Library. The purpose of the meeting was to present an overview of the MTPO, the MTPO planning process including the development of the 2035 LRTP, and solicit input. Of the participants in attendance at the meeting, general input themes included a call for increased highway safety, greater consideration of walking and biking needs as well as transit services, and addressing traffic operational issues at known high volume locations. • On April 19, 2012 a second public meeting was held as part of the public review and comment period on the proposed draft 2035 LRTP.

Characteristics of Public Participation

Characteristic	**Criteria**	**Description**
Well Defined PPP	Goals in PPP?	No
	Objectives?	No
	Measures of Effectiveness	No. Potential measures of effectiveness were listed but not applied.
Funding Level:	Overall Budget	$737,117
	PP Budget	Included as part of Program Administration and Multimodal and Long Range

		Transportation Planning. A total of $126,118 and $456,320 is budgeted for Program Administration and Multimodal and Long Range Transportation Planning respectively. Public participation is 1 of 13 tasks listed under Program Administration (estimated PP costs is $9,701) and 1 of 9 tasks for Multimodal and Long Range Transportation Planning, (estimated PP cost is $50,702). Though it is difficult determine, it is estimated that about $60,403 was budgeted for public participation activities.
	%	Approximately 8.2 %
Early and Continuous Participation	Was there public input during the following stages of Plan Development:	
	Was there Public Input when MTP was initiated?	No
	During the development of Alternatives?	Yes
	Review of Draft Plan?	Yes
	Before Final Plan Adoption?	Yes
Complete Information	Was all technical information made available to the public?	Yes
	Was technical information displayed using visualization techniques?	Yes
	Was technical information verbally explained to the public?	Yes
Broad Outreach	Techniques Used	1. Newspaper Advertisements 2. Open Public Comment Period 3. Press releases (Media Outreach) 4. Public Hearing (during MPO meeting) 5. Public Information Meetings 6. Survey (Web-based) 7. Website
	Outreach to low-income and	No

	minority populations	
	Geographic Diversity/Outgoing vs Incoming	No
	Info Available in multiple Languages	No
Responsiveness	Were specific comments noted and considered in the body or appendices or the MTP?	Yes
	Were responses provided to comments received?	Yes
	Was customer satisfaction captured or considered as a part of the MTP process?	TBD

Measurement of Characteristics of MPO Public Involvement

Characteristic	Measurement	Rating
Well Defined PPP:	Y/N	N
Funding Level:	Overall Budget	$737,117
	PP Budget	$50,702
	%	8.2 %
	H/M/L	M
Early and Continuous Participation	Y/N	Y
Complete Information Provided	Y/N	Y
Broad Outreach	Y/N	N
Responsiveness	Y/N	TBD

Public Participation Techniques Used, Level of Engagement, Deliberation

Technique Used	Phase of Plan Development:				Inform	Consult	Involve	Collaborate	Empower	Deliberation
	Initiation	Alternatives Development	Draft MTP	Final MTP						Y/N
Newspaper Advertisements		X	X	X	X					N
Open Public Comment Period			X			X				N
Press releases (Media Outreach)		X	X	X	X					N
Public Hearing (during MPO meeting)				X	X	X				N
Public Information Meetings		X	X		X	X				N
Survey (Web-based)		X				X	TBD			N
Website		X	X	X	X	X				N

Appendix O: National Capital Region TPB

MPO Profile Public Participation Profile: MPO 10
National Capital Region MPO

Sources:
MPO website: http://www.mwcog.org/transportation/tpb/
Data retrieved: 1/9/2013
Supplemental data provided by: Mr. Ronald Kirby, Director
Resources reviewed included: MPO webpage; MPO Bylaws; Citizens Guide document; 2007 Public Participation Plan; 2011-12 Unified Planning Work Plan; 2012 Constrained Long Range Plan Report; Citizens Advisory Committee Meeting Minutes February 1212 – July 2012; Citizens Advisory Committee Report for 2011 and 2012; Summary of Public Meeting; Letters sent in response to comments; Access for All Committee comments on 2012 CLRP; 2012 MPO Certification Document with Public Involvement Summary; 2012 Call for Projects; Approval of Plan scope; Air Quality Determination for 2012 Plan; Briefing on Project Submissions; Comments for Inclusion in CLRP; Compilation of Comments received on 2012 CLRP; Public Involvement Appendix; Review of comments received.

Phase I:

General MPO Information

MPO Name	National Capital Area MPO
Population	4,991,324
TMA/Non-TMA	TMA
Member Jurisdictions	City of Alexandria, VA; Arlington County, VA; Charles County, MD; City of College Park, MD; District of Columbia; City of Fairfax, VA; Fairfax County, VA; City of Falls Church, VA; City of Frederick, MD; City of Gaithersburg, MD; City of Greenbelt, MD; City of Manassas, VA; City of Manassas Park, VA; Montgomery County, MD; Prince George's County, MD; Prince William County, VA; City of Rockville, MD; City of Takoma Park, MD.
Number of Voting Members	31 - Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia, and the District of Columbia, local governments, the Washington Metropolitan Area Transit

	Authority, the Maryland and Virginia General Assemblies. City of Alexandria, VA (1); Arlington County, VA (1); Charles County, MD (1); City of College Park, MD (1); District of Columbia (3); City of Fairfax, VA (1); Fairfax County, VA (2); City of Falls Church, VA (1); City of Frederick, MD (1); City of Gaithersburg, MD (1); City of Greenbelt, MD (1); City of Manassas, VA (1); City of Manassas Park, VA (1); Montgomery County, MD (2); Prince George's County, MD (2); Prince William County, VA (2); City of Rockville, MD (1); City of Takoma Park, MD (1); Maryland House of Delegates (1); Maryland Senate (1); Virginia House of Delegates (1); District of Columbia DOT (1); Maryland DOT (1); Virginia DOT (1); Washington Metropolitan Area Transit Authority (1).
Voting Structure: Equal/Weighted/Both	All actions shall be by a majority vote of those present and voting. The bylaws contain a provision for a proportional or weighted vote, which can be requested by any voting member at any time.
Meeting Schedule:	The TPB shall hold regular meetings in January, March, April, May, June, September and November. Special meetings may be called by the Chairperson at any time. Records indicate that regular meetings are held monthly except in August.
Meetings Open to Public:	Yes
Other Committees	Steering Committee, Technical Committee, Citizens Advisory Committee, Access for All Advisory Committee, other Special Advisory Committees and Task Forces as needed
Funding Year (UPWP)	FY 2011-2012
Public Participation Plan Date	December 19, 2007
MTP Adoption Date	July 18, 2012

Metropolitan Transportation Plan Public Participation Summary

MTP Development Timeline	September 2011 – July 2012. The Transportation Planning Board (TPB) updates the MTP annually, so the process is continuous.
Public Involvement for MTP	• The TPB has instituted a comprehensive approach to public input for overall planning process – not just the MTP. The TPB developed and uses a public participation plan that provides "reasonable opportunities" for interested parties to comment on the MTP. • In October 2011, the TPB issued its annual "Call for Projects" to solicit from each agency a list of projects to be added to the CLRP. Project submissions were due at the end of December 2011. Several new highway and transit projects were submitted for both DC and VA. On January 12,

	2012, the TPB released the list of proposed additions for a 30-day public comment period. • Following the comment period, the TPB approved the project submissions for inclusion in the air quality conformity analysis on February 15. This analysis was conducted to make sure the proposed changes would not impact the region's ability to meet federally designated air quality standards. • On June 14, 2012, the TPB released drafts of the CLRP, the FY 2013- 2018 Transportation Improvement Program (TIP) and the related Air Quality Conformity Assessment for a 30-day public comment period. The TPB reviewed and responded to the public comments before approving the CLRP, TIP and Conformity Assessment on July 18, 2012. • The TPB is regularly advised by two citizen-led committees that report directly to the Board: the Citizens Advisory Committee (CAC) and the Access for All Advisory Committee (AFA). Both the CAC and AFA Committee provided input into the development of the MTP. - The CAC promotes public involvement in the region's transportation planning efforts, and provides independent, region-oriented citizen advice to the TPB on transportation plans, programs and issues. - To ensure ongoing participation from low-income and minority communities and people with disabilities, the Access for All Advisory (AFA) Committee advises the Board on transportation issues, programs, policies and services that are important to these communities, and to ensure their concerns are being addressed by the TPB process. Each year the AFA comments on the long-range plan. The AFA received a presentation on the significant changes to the Draft 2011 CLRP at its July 14, 2011 meeting. The AFA encouraged the District of Columbia Department of Transportation to invest in further bus lanes, and urged the Virginia department of Transportation to ensure that bus service wouldn't be negatively impacted by the development of the Dulles Metrorail project and the HOT lanes projects on I-95/I-395 and the Capital Beltway. • The TPB Website contains a webpage for the development of the plan. This webpage provides information on how to "Get Involved", comment on the plan, or participate in the efforts of the CAC and AFA committees.

Characteristics of Public Participation

Characteristic	Criteria	Description
Well Defined PPP	Goals in PPP?	Yes
	Objectives?	Yes
	Measures of Effectiveness	Yes
Funding Level:	Overall Budget	$13,952,800
	PP Budget	$471,900
	%	3.4% (Calculated)
Early and Continuous Participation	Was there public input during the following stages of Plan Development:	
	Was there Public Input when MTP was initiated?	No
	During the development of Alternatives?	Yes
	Review of Draft Plan?	Yes
	Before Final Plan Adoption?	Yes
Complete Information	Was all technical information made available to the public?	Yes
	Was technical information displayed using visualization techniques?	Yes
	Was technical information verbally explained to the public?	Yes
Broad Outreach	Techniques Used	Citizens Advisory Committees (CAC, AFA) Newspaper Advertisements Open Public Comment Period Public comment during MPO meeting Public Information Meeting Website (Searchable database, comment form, etc.)
	Outreach to low-income and	Yes

	minority populations	
	Geographic Diversity/Outgoing vs Incoming	No
	Info Available in multiple Languages	Yes
Responsiveness	Were specific comments noted and considered in the body or appendices or the MTP?	Yes. Submitted in a report to the TPB and made available on the website.
	Were responses provided to comments received?	Yes. Submitted in a report to the TPB and made available on the website.
	Was customer satisfaction captured or considered as a part of the MTP process?	No

Measurement of Characteristics of MPO Public Involvement

Characteristic	Measurement	Rating
Well Defined PPP:	Y/N	Y
Funding Level:	Overall Budget	$13,952,800
	PP Budget	$471,900
	%	3.4%
	H/M/L	L
Early and Continuous Participation	Y/N	Y
Complete Information Provided	Y/N	Y
Broad Outreach	Y/N	Y
Responsiveness	Y/N	Y

Public Participation Techniques Used, Level of Engagement, Deliberation

Technique Used	Phase of Plan Development:				Inform	Consult	Involve	Collaborate	Empower	Deliberation
	Initiation	Alternatives Development	Draft MTP	Final MTP						Y/N
Citizens Advisory Committees (CAC, AFA)			X		X	X				N
Newspaper Advertisements			X		X					N
Open Public Comment Period			X			X				N
Public comment during MPO meeting		X	X	X						N
Public Information Meeting			X							N
Website		X	X	X	X	X				N

Phase II: Reflections of Public Input in MTP

Quantity of Participation

Technique	No. of Comments/Input Received
Citizens Advisory Committees (CAC, AFA)	CAC – 24 Members AFA-
Newspaper Advertisements	-
Open Public Comment Period	157
Public comment during MPO meeting	4

Public Information Meeting	3
Website	-

Outputs of Participation

Input	Source of Input	Associated PP Technique	(Theme) Input Related to:	Frequency of Occurrence
			Modal Choices	
The AFA approves of the many public transportation projects included in the 2012 CLRP and stresses the importance of ensuring that these options are accessible and affordable to low-income communities and people with disabilities. The AFA would also like to ensure that low fares and accessibility remain a priority as these projects proceed.	AFA Comments on the CLRP	Citizens Advisory Committee: AFA	Support public transportation options that are accessible and affordable	1
			Project Recommendations	
Support of the reinstatement of the westbound I-66 spot improvement number 2 into the Plan.	Meeting Minutes/Summary of Verbal Comments	Public comment during MPO meeting	Support I-66 Spot Improvement Phase 2	2
Opposition to the reinstatement of the westbound I-66 spot improvement number 2 into Plan.	Meeting Minutes/Summary of Verbal Comments	Public comment during MPO meeting	Oppose I-66 Spot Improvement Phase 2	2
Recommend that the TPB not include the Manassas Battlefield Bypass project in the 2012 CLRP and instead defer voting on that until the Section	Meeting Minutes/Summary of Verbal Comments	Public comment during MPO meeting	Oppose Battlefield Bypass project; Close roads through the Park	1

106 documents are produced to verify that the National Park Service can indeed achieve binding legal commitments to close the roads through the park.				
Concerned about the I-270 corridor highway expansion included in the CLRP.	Email/ Website	Open Public Comment Period	Reconsider I-270 expansion	1
Approve the projects located in Ward 7 of the District of Columbia because they were important to improving accessibility, mobility, and the quality of life in the neighborhood	Email/ Website	Open Public Comment Period	Approve the projects located in Ward 7 of the District of Columbia	12
Concern that the Maryland Transit Administration's MARC growth and investment plan was not funded in the CLRP.	Email/ Website	Open Public Comment Period	Include funding for the MARC growth and investment plan	1
Remove the Manassas National Battlefield Bypass project and charge a $5 entrance fee to the park to reduce congestion assessment. He said he thought that was a pretty solid guarantee that closure of the roads would be part of the project.	Email/ Website	Open Public Comment Period	Oppose Battlefield Bypass project; Close roads through the Park	1
Include Phase 2 of planned spot improvements to westbound I-66 inside the Capital Beltway	Email/ Website	Open Public Comment Period	Support I-66 Spot Improvement Phase 2	157
			Funding	
The CLRP falls short of addressing the challenges that the region's transportation system faces. Additional funding is needed to address transportation needs for the	Letter	Open Public Comment Period	Study unconstrained transportation needs.	1

region				
			Other	
Members noted a number of inaccuracies in the information regarding project costs and completion dates. Some of these inconsistencies reflected differences between the draft TIP and the CLRP.	Meeting Minutes	Citizens Advisory Committee: CAC/Public Information meeting	Address inconsistencies in project costs and completion dates	1
Participants wondered why public comment was being solicited at this point in the process when essentially the TIP had just been assembled in the last few days from inputs provided by the states and WMATA.	Meeting Minutes	Citizens Advisory Committee: CAC/Public Information meeting	Public comment should be gathered earlier in the process	1
Participants suggested that it would have been useful for state DOT and WMATA representatives to be present at the forum. They further noted that such a forum could be a chance for a more thoughtful reassessment and public discussion regarding the anticipated direction of regional transportation planning.	Meeting Minutes	Citizens Advisory Committee: CAC/Public Information meeting	Request representatives from the States and District attend public forum	1

Metropolitan Transportation Plan Analysis

Collective Public Input	Input Reflected in Transportation Plan			Comments
	Negative Outcome	Inherent Outcome	Positive Outcome	
Address inconsistencies in project costs and completion dates	X			
Support public transportation options that are accessible and affordable		X		
Support I-66 Spot Improvement Phase 2		X		

Study unconstrained transportation needs		X		
Reconsider I-270 expansion	X			
Approve the projects located in Ward 7 of the District of Columbia		X		
Include funding for the MARC growth and investment plan		X		
Oppose Battlefield Bypass project; Close roads through the Park	X	X*		*The project remains in the plan but the roads are to remain closed due to federal requirements
Total	3	6		

Appendix P: Richmond MPO

MPO Profile Public Participation Profile: MPO 11
Richmond Area MPO

Sources:
MPO website: http://www.richmondregional.org/MPO/MPO.htm
Data retrieved: 1/12/2013
Supplemental data provided by Mr. Daniel Lysy, Director of Transportation
Resources reviewed included: MPO webpage; MPO Bylaws; 2007 Public Participation Plan; FY 2012 Unified Planning Work Program; 2035 Long Range Transportation Plan; Leadership Metro Richmond Website (http://www.lmronline.org/);

Phase I:

General MPO Information

MPO Name	Richmond Area MPO
Population	934,060
TMA/Non-TMA	TMA
Member Jurisdictions	Town of Ashland, Charles City County, Chesterfield County, Goochland County, Hanover County, Henrico County, New Kent County, Powhatan County, City of Richmond
Number of Voting Members	28 – Town of Ashland (1), Charles City County (1), Chesterfield County (4), Goochland County (2), Hanover County (3), Henrico County (4), New Kent County (2), Powhatan County (2), City of Richmond (4), Capital Region Airport Commission (1), GRTC Transit System (1), Richmond Metropolitan Authority (1), Richmond Regional Planning District Commission (1), Virginia Department of Transportation (1)
Voting Structure: Equal/Weighted/Both	Equal votes, weighted membership
Meeting Schedule:	Monthly as necessary, normally on the second Thursday of the month
Meetings Open to Public:	Yes
Other Committees	Technical Advisory Committee (TAC); Citizens Transportation Advisory Committee (CTAC); Elderly and Disabled Advisory Committee (EDAC)
Funding Year (UPWP)	FY 2011 – 2012

Public Participation Plan Date	April, 12, 2007
MTP Adoption Date	July 12, 2012

Metropolitan Transportation Plan Public Participation Summary

MTP Development Timeline	The development of the socioeconomic data and forecasts for the 2035 Plan began in May 2009 and was completed in October 2011. The development of the Metropolitan Transportation Plan took place July 2011 through plan adoption by the MPO on July 12, 2012.
Public Involvement for MTP	• Outreach for the 2035 LRTP took place in three phases: (1) early input through the Capital Region Collaborative (CRC) "Strawman" and meetings with Board of Supervisors and Councils; (2) invitation for public comment on the list of proposed projects (in advance of conducting project prioritization review/ranking, reviewing project list for financial capacity, and the air quality and environmental justice review); and (3) invitation for public comment on the proposed plan and air quality findings prior to final action by the MPO. Multiple participation techniques were used throughout the process. • The RAMPO's process for conducting the 2035 LRTP update included the formation of an LRTP Advisory Committee to provide guidance to RAMPO staff and additional citizen input. Representatives were included from each member jurisdiction as well as from existing RAMPO advisory committees and local, state, and federal transportation agencies. • Input provided by the CRC "Strawman" effort was used to guide the early development of the LRTP update and meetings with local elected boards were used to raise local awareness of the ensuing plan update. • Initial project lists for the LRTP we posted for public review from November 7 through December 1, 2011 and the public were notified of the opportunity to review the lists through direct mailings, local media and on the RRPDC website. • Three public review meetings were held throughout the Richmond Region in late May and early June in coincidence with the public review period for the draft LRTP plan document.

Characteristics of Public Participation

Characteristic	Criteria	Description
Well Defined PPP	Goals in PPP?	No
	Objectives?	No
	Measures of Effectiveness	No
Funding Level:	Overall Budget	$2,570,135
	PP Budget	$105,000
	%	4.07% (Calculated)
Early and Continuous Participation	Was there public input during the following stages of Plan Development:	
	Was there Public Input when MTP was initiated?	Yes
	During the development of Alternatives?	Yes
	Review of Draft Plan?	Yes
	Before Final Plan Adoption?	Yes
Complete Information	Was all technical information made available to the public?	Yes
	Was technical information displayed using visualization techniques?	Yes
	Was technical information verbally explained to the public?	Yes
Broad Outreach	Techniques Used	1. Advisory Committee (with voting Citizen Members) 2. Cable Access Television 3. Citizens Advisory Committees (CTAC, EDAC) 4. Direct mail to citizens and interested parties 5. Email distribution List of citizens and interested parties 6. Newspaper advertisements 7. Open Public Comment Period

		8. Presentations to Community Groups ("Road-shows by Request" – targeted presentations on the LRTP projects and plan to groups as requested such as: Senior Connections, United Way, Resources for Independent Living, NAACP, and Limited English Proficiency/Speaking audiences) 9. Press releases 10. Public Information Meeting 11. Radio advertisements 12. Survey (Web-based) 13. Webcast (Leadership Metro Richmond webcast and a live studio audience) 14. Website 15. Workshops (CRC Strawman)
	Outreach to low-income and minority populations	Yes
	Geographic Diversity/Outgoing vs Incoming	Yes
	Info Available in multiple Languages	Yes
Responsiveness	Were specific comments noted and considered in the body or appendices or the MTP?	Yes, in the appendix
	Were responses provided to comments received?	Yes
	Was customer satisfaction captured or considered as a part of the MTP process?	No

Measurement of Characteristics of MPO Public Involvement

Characteristic	Measurement	Rating
Well Defined PPP:	Y/N	N
Funding Level:	Overall Budget	$2,570,135
	PP Budget	$105,000
	%	4%
	Y/N	L
Early and Continuous Participation	Y/N	Y
Complete Information Provided	Y/N	Y
Broad Outreach	Y/N	Y
Responsiveness	Y/N	Y

Public Participation Techniques Used, Level of Engagement, Deliberation

Technique Used	Phase of Plan Development:				Inform	Consult	Involve	Collaborate	Empower	Deliberation
	Initiation	Alternatives Development	Draft MTP	Final MTP						Y/N
Advisory Committee (with voting Citizen Members)		X	X	X			X	X		Y
Cable Access Television		X			X					N
Citizens Advisory Committees (CTAC, EDAC)		X	X		X	X				N
Community Partnership (CRC Strawman)	X						X			Y
Direct mail to citizens and		X	X		X					N

interested parties										
Email distribution list of citizens and interested parties		X	X		X					N
Newspaper advertisements		X	X		X					N
Open Public Comment Period		X	X			X				
Presentations to Community Groups ("Road-shows by Request" – targeted presentations on the LRTP projects and plan to groups as requested such as: Senior Connections, United Way, Resources for Independent Living, NAACP, and Limited English Proficiency/Speaking audiences)			X		X	X				N
Press releases		X	X		X					
Public Information Meeting			X		X	X				
Radio advertisements		X	X		X					
Survey	X					X				
Webcast (Leadership Metro Richmond		X			X					N

webcast and a live studio audience)										
Website		X	X	X	X	X				N

Phase II: Reflections of Public Input in MTP

Quantity of Participation

Technique	No. of Comments/Input Received
Advisory Committee (with voting Citizen Members)	Ongoing
Cable Access Television	-
Citizens Advisory Committees (CTAC, EDAC)	Ongoing
Community Partnership (CRC Strawman)	Not available
Direct mail to citizens and interested parties	-
Email distribution list of citizens and interested parties	-
Newspaper advertisements	-
Open Public Comment Period	11
Presentations to Community Groups ("Road-shows by Request" – targeted presentations on the LRTP projects and plan to groups as requested such as: Senior Connections, United Way, Resources for Independent Living, NAACP, and Limited English Proficiency/Speaking audiences)	-
Press releases	-
Public Information Meeting	1 comment card

Radio advertisements	-
Survey	20
Webcast (Leadership Metro Richmond webcast and a live studio audience)	-
Website	-

Outputs of Participation

Input	Source of Input	Associated PP Technique	(Theme) Input Related to:	Occurrences
			Goals	
Maintenance of the existing system is important	Survey Results	Survey (web-based)	Maintain existing system	84%
Reducing congestion on the highway system in the Richmond Region is important	Survey Results	Survey (web-based)	Reduce congestion	58.8%
Improving safety and Security associated with the operation of the transportation system in Richmond is Important	Survey Results	Survey (web-based)	Improve safety and security	62.5%
Building and preserving Park and Ride facilities in the Richmond Region is Important	Survey Results	Survey (web-based)	Improve park and ride options	67%
Providing transit and public transportation options in the Richmond Region is Important	Survey Results	Survey (web-based)	Improve and Increase Regional Transit	93.3%
Providing bicycling connections and facilities in the Richmond regions is important	Survey Results	Survey (web-based)	Improve and Increase Bicycle Infrastructure	73.3%
Providing pedestrian connections and facilities in the Richmond region is important	Survey Results	Survey (web-based)	Improve and Increase Pedestrian Infrastructure	73.3%
Increasing the frequency, reliability and	Survey	Survey (web-	Improve Passenger rail	86.7%

availability of passenger rail service in the Richmond Region is important	Results	based)		
Increasing the transportation and economic opportunities associated with the Port of Richmond is important	Survey Results	Survey (web-based)	Improve port and freight movement	53.3%
M-General bridge maintenance	Survey Results	Survey (web-based)	Maintain existing system	1
M-Adequate funding for resurfacing or rebuilding roads around the region	Survey Results	Survey (web-based)	Maintain existing system	2
M-Pothole repair and general maintenance along Three Chopt Road from Bandy field south to Grove Ave	Survey Results	Survey (web-based)	Maintain existing system	2
Consider how transportation impacts quality of life and the environment; sustainability	Email	Open Public Comment Period	Environmental sustainablity	1
Address issues related to Suburban Sprawl and Land Use	Letter	Open Public Comment Period	Integrate land use and transportation planning	1
			Modal Choice	
C-Invest in public transportation; more walkable and bike friendly neighborhoods	Survey Results Survey Results	Survey (web-based) Survey (web-based)	Improve and Increase Regional Transit	1
C-Invest in public transportation; more walkable and bike friendly neighborhoods	Survey Results Survey Results	Survey (web-based) Survey (web-based)	Improve and Increase Bicycle/Ped Infrastructure	1
Increase transit service to suburban areas (Chesterfield); Improve public Transit	Survey Results; Email	Survey (web-based); Open Public Comment Period	Improve and Increase Regional Transit	8
Improve/increase the facilities for	Email	Open Public	Improve and Increase Bicycle/Ped	9

bicycles; Improve/Increase sidewalks and pedestrian facilities		Comment Period	Infrastructure	
Improve CareVan paratransit service	Email	Open Public Comment Period	Improve Paratrasit	1
			Project Recommendations	
M-Add sidewalk, trail or bike lane along Bliley Road (connection to Lucille M Brown Middle School	Survey Results	Survey (web-based)	Add sidewalk, trail or bike lane along Bliley Road (connection to Lucille M Brown Middle School	2
M-C-Shockoe valley bridge, 64 E of the Shockoe bridge to the airport, Route 5 in Henrico near the county line	Survey Results	Survey (web-based)	Shockoe valley bridge, 64 E of the Shockoe bridge to the airport, Route 5 in Henrico near the county line	3
C-Bus/light rail on Broad Street from Rocketts Landing to Willow Lawn	Survey Results	Survey (web-based)	Bus/light rail on Broad Street from Rocketts Landing to Willow Lawn	1
C-bottlenecks at Bryant Park Interchange,	Survey Results	Survey (web-based)	Bottlenecks at Bryant Park Interchange	1
I-64 West and I-95 Interchange; I-95 interchanges near downtown	Survey Results	Survey (web-based)	I-64 West and I-95 Interchange; I-95 interchanges near downtown	4
C-Hull St. between Winterpock and Woodlake Village Parkway west	Survey Results	Survey (web-based)	Hull St. between Winterpock and Woodlake Village Parkway west	1
C-High speed rail to DC (along (-95)	Survey Results	Survey (web-based)	High speed rail to DC (along (-95)	7
Widen Forest Hill from 2 to 4 lanes between Westover Hills and Semms	Survey Results	Survey (web-based)	Widen Forest Hill from 2 to 4 lanes between Westover Hills and Semms	1
Hull Street/ 288 intersection	Survey Results	Survey (web-based)	Hull Street/ 288 intersection	2
Widen Parham Road (150) between River Road and I-64	Survey Results	Survey (web-based)	Widen Parham Road (150) between River Road and I-64	2
Widen Gaskins from Patterson to I-64	Survey Results	Survey (web-based)	Widen Gaskins from Patterson to I-64	1
New Intersection on Alverser Rd near Koger Blvd and Midlothian Turnpike	Survey Results	Survey (web-based)	New Intersection on Alverser Rd near Koger Blvd and Midlothian Turnpike	1
Pedestrian and Bicycle improvements on	Survey	Survey (web-	Pedestrian and Bicycle improvements	2

Janke Rd between Chippenham and Forest Hill	Results	based)	on Janke Rd between Chippenham and Forest Hill	
Expand park and ride at US 60 and Bottoms Bridge	Survey Results	Survey (web-based)	Expand park and ride at US 60 and Bottoms Bridge	1
Keep Capitol trail on schedule	Email	Open Public Comment Period	Capitol trail	1
Focus on alternatives to driving; teleworking; alternate work schedules	Email	Open Public Comment Period	Travel Demand Management Strategies	1
Electric Vehicle charging stations	Email	Open Public Comment Period	Increase electric vehicle charging stations	2
Do not widen New Market Road	Email	Open Public Comment Period	Remove New Market Road widening Project from the plan	1
Provide transit service on route 10, route 1, route 60, route 360 and route 288	Comment Form	Public Information Meeting	Provide transit service on route 10, route 1, route 60, route 360 and route 288	1
			Other	
Address issues with reported data on population distribution	Email	Open Public Comment Period	Specific comments on data in the plan	1
Revise project list to alter the modal split of funds between highway and transit (an other modes)	Email	Open Public Comment Period	Revise project list to alter the modal split of funds between highway and transit (an other modes)	1
Provide more clarity on the funding included in the Plan	Email	Open Public Comment Period	Provide more clarity on the funding included in the Plan	1
Improve discussion of performance measures to reflect impacts “per capita”	Email	Open Public Comment Period	Improve discussion of performance measures to reflect impacts “per capita”	1

Metropolitan Transportation Plan Analysis

Checklist	Input Reflected in Transportation Plan			Comments
	Negative Outcome	Inherent Outcome	Positive Outcome	
Maintain existing system		X		
Reduce congestion		X		
Improve safety and security		X		
Improve park and ride options		X		
Improve and Increase Regional Transit		X		
Improve and Increase Bicycle Infrastructure		X		
Improve and Increase Pedestrian Infrastructure		X		
Improve Passenger rail		X		
Improve port and freight movement		X		
Add sidewalk, trail or bike lane along Bliley Road (connection to Lucille M Brown Middle School		X*		*Vision Plan
Shockoe valley bridge, 64 E of the Shockoe bridge to the airport, Route 5 in Henrico near the county line	X			
Bus Rapid Transit/light rail on Broad Street from Rocketts Landing to Willow Lawn		X*		*Vision Plan
bottlenecks at Bryant Park Interchange	X			
I-64 West and I-95 Interchange; I-95 interchanges near downtown		X		
Hull St. between Winterpock and Woodlake Village Parkway west		X		
High speed rail to DC (along I-95)		X		
Widen Forest Hill from 2 to 4 lanes between Westover Hills and Semms	X			
Hull Street/ 288 intersection		X		
Widen Parham Road (150) between River Road and I-64	X			
Widen Gaskins from Patterson to I-64	X			
New Intersection on Alverser Rd near Koger Blvd and	X			

Midlothian Turnpike				
Pedestrian and Bicycle improvements on Janke Rd between Chippenham and Forest Hill	X			
Expand park and ride at US 60 and Bottoms Bridge		X*		*Vision Plan
Virginia Capitol trail		X		
Environmental sustainability		X		
Travel Demand Management Strategies		X		
Improve Paratrasit		X		
Increase electric vehicle charging stations			X	
Remove New Market Road widening Project from the plan	X			
Integrate land use and transportation planning		X		
Specific comments on data in the plan			X	
Revise project list to alter the modal split of funds between highway and transit (an other modes)	X			
Provide more clarity on the funding included in the Plan	X			
Improve discussion of performance measures to reflect impacts "per capita"			X	
Total	**10**	**21**	**3**	

Appendix Q: Roanoke MPO

MPO Profile Public Participation Profile: MPO 12
Roanoke Valley Area MPO

Sources:
MPO website: http://www.rvarc.org/mpo/
Data retrieved: 1/12/2013
Supplemental data provided by: Mr. Mark McCaskill, Senior Planner
Resources reviewed included: MPO webpage; MPO Bylaws; 2007 Public Participation Plan; 2011 Unified Planning Work Program; MTP; raw data from surveys and kiosks; June 23, 2011 Meeting Minutes.

Phase I:

General MPO Information

MPO Name	Roanoke Valley Area
Population	227,507
TMA/Non-TMA	TMA (Not at the time of the MTP adoption)
Member Jurisdictions	Bedford County, Botetourt County, the City of Roanoke, Roanoke County, the City of Salem, the Town of Vinton
Number of Voting Members	15 - Intergovernmental Review Agency (Roanoke Valley- Alleghany Regional Commission) (1), Bedford County (1), Botetourt County (2), the City of Roanoke (2), Roanoke County (2), the City of Salem (2), the Town of Vinton (2), Virginia Dept. of Transportation (1), Greater Roanoke Transit Company (1), Roanoke Regional Airport Commission (1)
Voting Structure: Equal/Weighted/Both	Equal among voting members. Weighted membership. Voting representation on the MPO by local governments shall be determined by the following formula: If the population within the urbanized boundary is less than 7,000, the locality shall have one (1) member; communities with populations of 7,000 or greater within the urbanized boundary shall have two (2) members. Voting representation shall be reviewed upon the release of the decennial U.S. Census.
Meeting Schedule:	Meetings of the MPO shall be held on the fourth Thursday of the following months:

	January, March, April, June, September, and November, at 1:30 in the afternoon, except that when a regular meeting day falls on or adjacent to a State-recognized holiday, the meeting shall be held as determined by the MPO or its Chairman.
Meetings Open to Public:	Yes
Other Committees	Transportation Technical Committee, Citizen Advisory Committee
Funding Year (UPWP)	July 1, 2010– June 30, 2011
Public Participation Plan Date	June 2007
MTP Adoption Date	June 23, 2011

Metropolitan Transportation Plan Public Participation Summary

MTP Development Timeline	The 2035 Constrained Long Range Plan was developed from Mid-2008 through adoption in June of 2011.
Public Involvement for MTP	• The RVAMPO public participation and stakeholder review process for the MTP included a 3 pronged approach: gathering direct input from the public, providing opportunities for SAFETEA-LU Stakeholders to review and comment on aspects of the plan, and input from representative groups. • Direct Public Input included the use of several techniques. Touch Screen Kiosks were deployed in several locations around the region from September of 2006 to October of 2008. These kiosks gathered public feedback on various transportation topics and regional projects. Multiple Focus Groups were held with Neighborhood Groups and Civic Organizations from April 2005 to April 2007 to gain insight on transportation needs and determine patterns among responses from participants. An Annual Public Meeting Concerning CLRTP Process and Assumptions was held June 23, 2010 to invite citizens to review and discuss planning assumptions, data, and concepts that will be used to develop the 2035 Plan. Other direct public involvement tools included a website, a web-based survey, piggy-backing on VDOT and VDRPT public events, and utility bill stuffers. The following events were advertised in local newspapers: - A 30-day comment period commencing on May 8, 2011. - A 30-day comment period commencing on May 12, 2011. - A public open house was held on May 29, 2011.

	- A public open house was held on June 2, 2011 - Official public hearings were held June 12, 2011 and June 19, 2011. - The final public hearing took place on June 23, 1011 • SAFETEA-LU Stakeholder Review: A database of Stakeholder Agencies was developed to aid in agency review of the Plan drafts (agencies include: State Government, Non-Profit Organizations and Transportation Modal Interests). • Representative Group Input: Several representative groups provided input into the plan development process including the Community Advisory Committee (CAC), Transportation Technical Committee (TTC), and Ad-Hoc and special purpose committees (Bicycle and Pedestrian, Air Quality, Greenway and Other).

Characteristics of Public Participation

Characteristic	**Criteria**	**Description**
Well Defined PPP	Goals in PPP?	Yes
	Objectives?	Yes
	Measures of Effectiveness	No
Funding Level:	Overall Budget	$530,262
	PP Budget	$25,496
	%	4.8% (Calculated)
Early and Continuous Participation	Was there public input during the following stages of Plan Development:	
	Was there Public Input when MTP was initiated?	Yes. Data gathered continuously in years leading up to plan development were used to develop goals and objectives of the plan.
	During the development of Alternatives?	No
	Review of Draft Plan?	Yes
	Before Final Plan Adoption?	Yes
Complete Information	Was all technical information made available to the public?	No. Information was available upon request but was not proactively shared with the public.
	Was technical information	Yes

	displayed using visualization techniques?	
	Was technical information verbally explained to the public?	Yes
Broad Outreach	Techniques Used	1. Community Advisory Committee 2. Focus Groups (Neighborhood groups/Civic Organizations) 3. Kiosks 4. News Paper Advertisements 5. Open Public Comment Period 6. Piggy-back on other events (Display tables at various VDOT 6-Year Improvement Program Meetings) 7. Public Information Meetings (Annual Meeting Concerning CLRTP Process and Assumptions; Public Open Houses) 8. Public Hearing (during MPO meeting) 9. Survey (web-based) 10. Utility Bill Stuffers 11. Website
	Outreach to low-income and minority populations	Yes
	Geographic Diversity/Outgoing vs Incoming	Yes
	Info Available in multiple Languages	No
Responsiveness	Were specific comments noted and considered in the body or appendices or the MTP?	Yes. The Survey results and Kiosk summaries were provided in the Plan.
	Were responses provided to comments received?	No
	Was customer satisfaction captured or considered as a	Yes

	part of the MTP process?	

Measurement of Characteristics of MPO Public Involvement

Characteristic	Measurement	Rating
Well Defined PPP:	Y/N	Y
Funding Level:	Overall Budget	$530,262
	PP Budget	$25,496
	%	4.8%
	H/M/L	L
Early and Continuous Participation	Y/N	Y
Complete Information Provided	Y/N	N
Broad Outreach	Y/N	Y
Responsiveness	Y/N	Y

Public Participation Techniques Used, Level of Engagement, Deliberation

Technique Used	Phase of Plan Development:				Inform	Consult	Involve	Collaborate	Empower	Deliberation
	Initiation	Alternatives Development	Draft MTP	Final MTP						Y/N
Community Advisory Committee	X						X			Y
Focus Groups (Neighborhood groups/Civic Organizations)	X						X			N
Kiosk	X					X				
News Paper Advertisements			X	X	X					N

Open Public Comment Period			X			X				N
Piggy-back on other events (Display tables at various VDOT 6-Year Improvement Program Meetings)			X		X					N
Public Information Meetings (Annual Meeting Concerning CLRTP Process and Assumptions; Public Open House)	X		X		X	X				N
Public Hearing (during MPO meeting)			X	X	X	X				N
Utility Bill Stuffers			X		X					N
Survey (web-based)	X					X				N
Website	X		X	X	X	X				N

Phase II: Reflections of Public Input in MTP

Quantity of Participation

Technique	No. of Comments/Input Received
Community Advisory Committee	Fluctuating Membership
Focus Groups (Neighborhood groups/Civic Organizations)	10 Focus Groups
Kiosks	2600+

News Paper Advertisements	-
Open Public Comment Period	1
Piggy-back on other events (Display tables at various VDOT 6-Year Improvement Program Meetings)	-
Public Information Meetings (Annual Meeting Concerning CLRTP Process and Assumptions; Public Open House)	Unknown
Public Hearing (during MPO meeting)	0
Utility Bill Stuffers	-
Survey (web-based)	Including kiosks 2600+
Website	-

Outputs of Participation

Input	Source of Input	Associated PP Technique	(Theme) Input Related to:	Frequency of Occurrence
			Goals	
Traffic congestion is a problem in the Roanoke Valley	Survey Results	Kiosks; Online Survey	Reduce Congestion	56%
Safety improvements are needed in the Roanoke Valley	Survey Results	Kiosks; Online Survey	Improve Safety	51%
Road maintenance is fair or poor	Survey Results	Kiosks; Online Survey	Maintain existing transportation system	54%
Higher density development should be encouraged in order to reduce the traffic effects of sprawl	Survey Results	Kiosks; Online Survey	Integrate Land use and transportation	47%
Driver education; reduce mobile phone use while driving; ban mobile	Focus Group	Focus Groups	Improve Safety	N/A

phone use while driving statewide	Summaries			
Improve safety for pedestrians; improve/increase crosswalks	Focus Group Summaries	Focus Groups	Improve Safety	N/A
			Modal Choices	
Public Transportation Improvements are needed	Survey Results	Kiosks; Online Survey	Improve public transportation	35%
Increase/Improve sidewalks	Survey Results	Kiosks; Online Survey	Improve Pedestrian infrastructure	60%
Increase/Improve on-road bicycle lanes	Survey Results	Kiosks; Online Survey	Improve bicycle infrastructure	74%
Greenway network should be expanded	Survey Results	Kiosks; Online Survey	Expand greenway network	59%
Rideshare and carpool programs are important	Survey Results	Kiosks; Online Survey	Improve travel demand management strategies	43%
Passenger rail to Richmond and DC	Survey Results	Kiosks; Online Survey	Passenger rail service	75%
Technology should be used to improve congestions	Survey Results	Kiosks; Online Survey	ITS	69%
Improve passenger rail options; provide Amtrak or TransDominion Express service to Washington, DC.	Focus Group Summaries	Focus Groups	Passenger rail service	N/A
Increase trails, greenways and bicycle lanes	Focus Group Summaries	Focus Groups	Improve bicycle infrastructure	N/A
Increase trails, greenways and bicycle lanes	Focus Group Summaries	Focus Groups	Expand greenway network	N/A
Enhance public transit to improve connectivity; increase frequency of existing bus routes; improve/increase bus shelters	Focus Group Summaries	Focus Groups	Improve public transportation	N/A
			Project Recommendations	

I-581 Interchanges should be improved	Survey Results	Kiosks; Online Survey	I-581 Interchange Improvements	72%
Bus service should be expanded	Survey Results	Kiosks; Online Survey	Expand existing bus service	62%
Widen I-81	Survey Results	Kiosks; Online Survey	Widen I-81	68%
Enhance public transit to improve connectivity; increase frequency of existing bus routes; improve/increase bus shelters	Focus Group Summaries	Focus Groups	Increase bus service and number of bus shelters	N/A
Traffic signal synchronization; speed detection cameras; red light enforcement	Focus Group Summaries	Focus Groups	Improve Pedestrian infrastructure	N/A
			Other	
RAIL Solution submission: Divert interstate freight way from I-81 corridor.	email	Open Public Comment Period	Divert interstate freight way from I-81 corridor	N/A

Metropolitan Transportation Plan Analysis

Checklist	Input Reflected in Transportation Plan			Comments
	Negative Outcome	Inherent Outcome	Positive Outcome	
Reduce Congestion		X		
Improve Safety		X		
I-581 Interchange Improvements		X		
Improve public transportation		X		
Expand existing bus service		X		
Improve Pedestrian infrastructure		X		
Improve bicycle infrastructure			X	
Expand greenway network			X	
Widen I-81		X		

Maintain existing transportation system		X		
Improve transportation demand management strategies			X	
Passenger rail service			X*	
ITS		X		
Integrate Land use and transportation		X		
Increase frequency of bus service and number of bus shelters		X		
Divert interstate freight way from I-81 corridor			X	
Total	**0**	**11**	**5**	

Appendix R: Tri-Cities MPO

MPO Profile Public Participation Profile: MPO 13
Tri-Cities MPO
(Source of information captured in parentheses. Data retrieved from Internet website 1/15/13)

Sources:
MPO website: http://www.craterpdc.org/transportation/mpo.htm
Data retrieved: 1/15/2012
Supplemental data provided by: Mr. Joseph Vinsh, Director of Transportatin
Resources reviewed included: MPO webpage; 2007 Public Participation Plan; FY 2012 Unified Planning Work Program; 2035 Long Range Plan; 2035 Long Range Plan Completion Schedule; MPO meeting minutes for July, August, and September 2012.

Phase I:

General MPO Information

MPO Name	Tri-Cities MPO
Population	149,029 (Census)
TMA/Non-TMA	Voluntary TMA (FHWA)
Member Jurisdictions	City of Petersburg, the City of Colonial Heights, and City of Hopewell, and portions of Chesterfield County, Prince George County and Dinwiddie County (Website)
Number of Voting Members	9 - Chesterfield County (1); City of Colonial Heights (1); Dinwiddie County (1); City of Hopewell (1); City of Petersburg (1); Prince George County (1); Crater PDC (1); Petersburg Area Transit (1); Virginia Department of Transportation (1) (Bylaws, Website)
Voting Structure: Equal/Weighted/Both	Equal (Bylaws)
Meeting Schedule:	Monthly, on the second Thursday at 4:30 p.m. (Website)
Meetings Open to Public:	Yes (Website)
Other Committees	Technical Committee (Website)
Funding Year (UPWP)	FY July 1, 2011-June 30, 2012 (UPWP)

Public Participation Plan Date	January 2007 (PPP)
MTP Adoption Date	August 2012. The document cover lists June 2012 as the Plan date, but records indicate that the plan was adopted in August 2012. (MTP)

Metropolitan Transportation Plan Public Participation Summary

MTP Development Timeline	The socio-economic forecast was endorsed by the MPO in March 2011. The 2035 MTP was adopted in August 2012 (2035 LRTP Schedule).
Public Involvement for MTP	• Public input on the 2035 Plan was initially gathered after the Tri-Cities Technical Advisory Committee approved the conformity project list in February of 2012. A public meeting was advertised and held to solicit public comment on the Draft 2035 LRTP project list on February 7, 2012. • On June 14, 2012 the MPO advertised the Draft 2035 Plan for a 30 day public comment period. The Conformity report for the plan was advertised for a 14 day comment period. The Draft plan was advertised for public review in local newspapers and on the MPO's webpage. Additionally, copies of the draft document were sent to local libraries as per the MPO's adopted public participation process. Any adverse comments received would be reviewed and addressed by MPO and VDOT Staff. • Opportunities for public input were provided both electronically via the MPO website and during 2 scheduled public meetings that were held on July 24, 2012 and August 9, 2012. The meetings were held at different times and locations within the transportation study area. No comments were received from the public. • The MPO endorsed the plan in August 2012. (2035 LRTP Schedule; MPO Meeting Minutes)

Characteristics of Public Participation

Characteristic	**Criteria**	**Description**
Well Defined PPP	Goals in PPP?	No (PPP)
	Objectives?	No (PPP)
	Measures of Effectiveness	Yes. An evaluation of public participation practices was conducted in 2008. (PPP)

Funding Level: * Need Information for appropriate year	Overall Budget	$495,390 (UPWP)
	PP Budget	$10,800 (UPWP)
	%	2.2% (Calculated)
Early and Continuous Participation	Was there public input during the following stages of Plan Development:	
	Was there Public Input when MTP was initiated?	No (2035 LRTP Schedule; MPO Meeting Minutes)
	During the development of Alternatives?	Yes (2035 LRTP Schedule; MPO Meeting Minutes)
	Review of Draft Plan?	Yes (2035 LRTP Schedule; MPO Meeting Minutes)
	Before Final Plan Adoption?	Yes (MPO Meeting Minutes)
Complete Information	Was all technical information made available to the public?	Yes (MPO Staff Supporting Documents)
	Was technical information displayed using visualization techniques?	Yes (MPO Staff Supporting Documents)
	Was technical information verbally explained to the public?	No (MPO Staff Supporting Documents)
Broad Outreach	Techniques Used	1. Hard Copy Document Availability 2. Newspaper Advertisements 3. Open Public Comment Period 4. Public comment during MPO meeting 5. Public Information Meetings 6. Website (2035 LRTP Schedule; MPO Meeting Minutes)
	Outreach to low-income and minority populations	No (MPO Staff Supporting Documents)
	Geographic Diversity/Outgoing vs	No (MPO Staff Supporting Documents)

	Incoming	
	Info Available in multiple Languages	No (MPO Staff Supporting Documents)
Responsiveness	Were specific comments noted and considered in the body or appendices or the MTP?	No (MTP)
	Were responses provided to comments received?	No (MPO Staff Supporting Documents)
	Was customer satisfaction captured or considered as a part of the MTP process?	No (MPO Staff Supporting Documents)

Measurement of Characteristics of MPO Public Involvement

Characteristic	Measurement	Rating
Well Defined PPP:	Y/N	N
Funding Level:	Overall Budget	$495,390
	PP Budget	$10,800
	%	2.2%
	H/M/L	L
Early and Continuous Participation	Y/N	Y
Complete Information Provided	Y/N	N
Broad Outreach	Y/N	N
Responsiveness	Y/N	N

Public Participation Techniques Used, Level of Engagement, Deliberation

Technique Used	Phase of Plan Development:				Inform	Consult	Involve	Collaborate	Empower	Deliberation
	Initiation	Alternatives Development	Draft MTP	Final MTP						Y/N
Hard Copy Document Availability			X		X					N
Newspaper Advertisements		X	X		X					N
Open Public Comment Period			X			X				N
Public comment during MPO meeting				X		X				N
Public Information Meetings		X	X		X	X				N
Website		X	X	X	X	X				N

Phase II: Reflections of Public Input in MTP

Quantity of Participation

Technique	No. of Comments/Input Received
Hard Copy Document Availability	N/A
Newspaper Advertisements	N/A
Open Public Comment Period	0
Public comment during MPO meeting	0
Public Information Meetings	0
Website	0

Appendix S: Winchester-Frederick MPO

MPO Profile Public Participation Profile: MPO 14
Winchester-Frederick MPO

Sources:
MPO website: http://www.winfredmpo.org/
Data retrieved: 1/15/2015
Supplemental data provided by Ms. Karen Taylor, Transportation Program Manager
Resources reviewed included: MPO webpage; 2007 Public Participation Plan; 2012 Unified Planning Work Program; 2034 Transportation Plan Update; May 16, 2012 MPO Meeting minutes; CAC Meeting Minutes March 2011 and May 2012.

Phase I:

General MPO Information

MPO Name	Winchester-Frederick MPO
Population	78,440
TMA/Non-TMA	Non-TMA
Member Jurisdictions	The City of Winchester, Frederick County, and the Town of Stephens City
Number of Voting Members	8 - The voting membership of the MPO shall be composed of three (3) voting members representing the City of Winchester, three (3) voting members representing Frederick County, and one (1) voting member representing the Town of Stephens City. The Secretary of Transportation shall appoint one (1) member to the MPO for the Commonwealth of Virginia.
Voting Structure: Equal/Weighted/Both	Each MPO member with voting rights shall have one (1) equal vote in all matters before the MPO.
Meeting Schedule:	Monthly, the 3rd Wednesday of each month
Meetings Open to Public:	Yes
Other Committees	Transportation Technical Committee; Citizens Advisory Committee
Funding Year (UPWP)	July 1, 2011 - June 30, 2012
Public Participation Plan Date	July 18, 2007
MTP Adoption Date	May, 2012

Metropolitan Transportation Plan (MTP) Public Participation Summary

MTP Development Timeline	May 2009 – May 2012
Public Involvement for MTP	• A public kickoff meeting on the Win-Fred 2035 Transportation Plan was conducted on May 12, 2009 in the City of Winchester. Newspaper and radio advertisements were made in advance of this meeting. MPO officials and NSVRC staff were present to answer questions. A PowerPoint presentation was in constant display, providing an introduction into the transportation planning process, the requirements of the 2035 transportation plan, and a request for feedback. Public comment sheets were provided and the public was encouraged to identify key transportation issues and areas of interest to staff. • The draft long-range plan was made available for viewing at the following locations from March 26, 2012 through April 14, 2012: - Win-Fred MPO website www.winfredmpo.org - Winchester City Hall – Planning Department Office - Frederick County Offices – Department of Planning and Zoning - Stephens City – Town Hall - Handley Public Library – Downtown - Handley Public Library - Bowman • A series of presentations on the 2035 Transportation draft document were presented by Win-Fred MPO staff as follows: - March 6, 2012 – Stephens City Town Council - March 29, 2012 – CAC & Public Meeting - April 10, 2012 –Winchester City Council - April 11, 2012 – Frederick County Board of Supervisors • A public meeting was held in the City of Winchester on March 29, 2012 at Our Health, 329 N. Cameron Street, Winchester, Virginia. For this meeting/workshop, information on the draft plan was provided, and representatives from the Transportation Plan study team were available to respond to questions on the draft plan. In addition, outreach was made with interested advocacy groups to discuss the 2035 Transportation Plan, and to obtain input on regional or local transportation concerns and issues.

	• The MPO Citizens Advisory Committee was provided updates on the MTP at the following meetings: - April 14th 2009 - March 9th 2010 - August 10th 2010 - March 8th 2011 - May 8, 2012 • The Win-Fred MPO website, www.winfredmpo.org, was developed to provide another way for the public to gain access to information on the MPO and the 2035 Long Range Transportation Plan. The Draft 2035 Transportation Plan document was provided on the web-site and in response to any e-mail requests in .pdf format throughout the public comment period March 26, 2012 through April 14, 2012. The final version of the plan document and a 2035 Plan Map is maintained on the Win-Fred MPO website. • At the conclusion of the public comment period for the draft 2035 Transportation Plan, the Win-Fred Policy Board adopted the final 2035 Transportation Plan. The plan was adopted on May 16, 2012. Prior to adoption, the Win-Fred Policy Board on May 16, 2012 discussed comments received during the public comment period.

Characteristics of Public Participation

Characteristic	Criteria	Description
Well Defined PPP	Goals in PPP?	Yes. (Page 4 of the PPP. These are not specifically listed as goals but are similar to the goals identified and listed in the PPPs of other MPOs included in this study).
	Objectives?	No
	Measures of Effectiveness	No
Funding Level:	Overall Budget	$666,551
	PP Budget	Included as part of Program Management and Administration and Long Range Transportation Plan Update. A total of $125,000 and $20,000 is budgeted for these two tasks respectively. Public participation is 1 of 3 tasks listed under Program Management and Administration (estimated PP costs is $41,666) and 2 of 6 tasks for LRTP Update, (estimated PP cost is $6,600). Though it is difficult to determine, it is estimated that about $48,266 was budgeted for public participation activities.

	%	Approximately 7.24%
Early and Continuous Participation	Was there public input during the following stages of Plan Development:	
	Was there Public Input when MTP was initiated?	Yes
	During the development of Alternatives?	No
	Review of Draft Plan?	Yes
	Before Final Plan Adoption?	Yes
Complete Information	Was all technical information made available to the public?	Yes
	Was technical information displayed using visualization techniques?	Yes
	Was technical information verbally explained to the public?	Yes
Broad Outreach	Techniques Used	1. Citizens Advisory Committee 2. Email distribution list of citizens and interested parties 3. Hard Copy Document Availability for Review 4. Newspaper Advertisements 5. Presentations to City Council 6. Public comment during MPO meeting 7. Public Information Meetings (Kick-off and Neighborhood Meetings) 8. Radio Advertisements 9. Website
	Outreach to low-income and minority populations	Yes
	Geographic Diversity/Outgoing vs Incoming	Yes
	Info Available in multiple	No

	Languages	
Responsiveness	Were specific comments noted and considered in the body or appendices or the MTP?	Yes
	Were responses provided to comments received?	No
	Was customer satisfaction captured or considered as a part of the MTP process?	No

Measurement of Characteristics of MPO Public Involvement

Characteristic	Measurement	Rating
Well Defined PPP:	Y/N	N
Funding Level:	Overall Budget	$666,551
	PP Budget	$42,771
	%	9%
	H/M/L	M
Early and Continuous Participation	Y/N	Y
Complete Information Provided	Y/N	Y
Broad Outreach	Y/N	Y
Responsiveness	Y/N	N

Public Participation Techniques Used, Level of Engagement, Deliberation

Technique Used	Phase of Plan Development:				Inform	Consult	Involve	Collaborate	Empower	Deliberation
	Initiation	Alternatives Development	Draft MTP	Final MTP						Y/N

Citizens Advisory Committee	X		X		X	X				N
Email distribution list of citizens and interested parties	X		X		X					N
Hard Copy Document Availability for Review			X		X					N
Newspaper Advertisements	X		X	X	X					N
Presentations to City Council			X		X	X				N
Public comment during MPO meeting				X		X				N
Public Information Meeting (Kick-off and Neighborhood Meetings)	X		X		X	X				N
Radio Advertisements	X				X					N
Website			X	X	X	X				N

Phase II: Reflections of Public Input in MTP

Quantity of Participation

Technique	No. of Comments/Input Received
Citizens Advisory Committee	-
Email distribution list of citizens and interested parties	-
Hard Copy Document Availability for Review	-
Newspaper Advertisements	-
Presentations to City Council	-
Public comment during MPO meeting	0
Public Information Meeting (Kick-off and Neighborhood Meetings)	7
Radio Advertisements	-
Website	-

Outputs of Participation

Input	Source of Input	Associated PP Technique	(Theme) Input Related to:					Occurrences
			Goal	Mode	Project	Funding	Other	
			Modal Choice					
Support expanded transit – service to retail and employment centers in Frederick County on north, east and south sides of	Summary of Comments	Public Information Meeting		Expand Transit service north, east and south				1

Winchester and to LFCC				of Winchester				
			Project Recommendations					
Bike/Ped safety issues on VA 7 – general comment supporting	Summary of Comments	Public Information Meeting			Bicycle and Pedestrian Safety Improvements to VA 7			1
Bike/Ped Access from Winchester Medical Center Area to Caroline Street/Linden Drive or Pond View Drive	Summary of Comments	Public Information Meeting			Bicycle and Pedestrian Improvements from Winchester Medical Area to Caroline Street/Linden Drive or Pond View Drive			1
Complete Green Circle Trail	Summary of Comments	Public Information Meeting			Green Circle Trail			1
Confirm specific alignment of Green Circle Trail to ensure consistency and relationship/right-of-way needs for adjacent properties	Summary of Comments	Public Information Meeting			Green Circle Trail			1
Featherbed Lane at South	Summary	Public			Featherbed			1

Loudon Street – Featherbed Intersection Capacity Improvements	of Comments	Information Meeting			Intersection Capacity Improvements at South Loudon Street			
			Other					
Request for increased sidewalk snow removal in City of Winchester	Summary of Comments	Public Information Meeting	Maintenance					1

Metropolitan Transportation Plan Analysis

Collective Public Input	Input Reflected in Transportation Plan			Comments
	Negative Outcome	Inherent Outcome	Positive Outcome	
Expand Transit service north, east and south of Winchester		X		
Bicycle and Pedestrian Safety Improvements to VA 7	X			
Bicycle and Pedestrian Improvements from Winchester Medical Area to Caroline Street/Linden Drive or Pond View Drive	X			
Green Circle Trail		X		
Featherbed Intersection Capacity Improvements at South Loudon Street	X			
Total	**3**	**2**	**-**	

Appendix T: SPSS Output

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Name of MPO x Was the plan more or less reflective of public input?	13	92.9%	1	7.1%	14	100.0%

Name of MPO x Was the plan more or less reflective of public input? [Crosstabulation]

			Was the plan more or less reflective of public input?		
			More Reflective	Less Reflective	Total
Name of MPO	Blacksburg	Count	0	1	1
		% within Name of MPO	.0%	100.0%	100.0%
	Bristol	Count	0	1	1
		% within Name of MPO	.0%	100.0%	100.0%
	Central Virginia	Count	1	0	1
		% within Name of MPO	100.0%	.0%	100.0%
	Charlottesville-Albemarle	Count	1	0	1
		% within Name of MPO	100.0%	.0%	100.0%
	Danville	Count	0	1	1
		% within Name of MPO	.0%	100.0%	100.0%
	Fredericksburg	Count	1	0	1
		% within Name of MPO	100.0%	.0%	100.0%
	Hampton Roads	Count	1	0	1
		% within Name of MPO	100.0%	.0%	100.0%
	Harrisonburg-Rockingham	Count	0	1	1
		% within Name of MPO	.0%	100.0%	100.0%
	National Capital Region	Count	0	1	1
		% within Name of MPO	.0%	100.0%	100.0%
	Richmond	Count	1	0	1
		% within Name of MPO	100.0%	.0%	100.0%
	Roanoke Valley Area	Count	1	0	1
		% within Name of MPO	100.0%	.0%	100.0%
	Tri-Cities	Count	0	1	1
		% within Name of MPO	.0%	100.0%	100.0%
	Winchester-Frederick	Count	0	1	1
		% within Name of MPO	.0%	100.0%	100.0%
Total		Count	6	7	13
		% within Name of MPO	46.2%	53.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.000[a]	12	.369
Likelihood Ratio	17.945	12	.117
Linear-by-Linear Association	.028	1	.867
N of Valid Cases	13		

a. 26 cells (100.0%) have expected count less than 5. The minimum expected count is .46.

Symmetric Measures

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.707			.369
Interval by Interval	Pearson's R	.048	.270	.161	.875[c]
Ordinal by Ordinal	Spearman Correlation	.041	.286	.137	.894[c]
N of Valid Cases		13			

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.
c. Based on normal approximation.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Was the plan well-defined? x Was the plan more or less reflective of public input?	13	92.9%	1	7.1%	14	100.0%

Was the plan well-defined? x Was the plan more or less reflective of public input? [Crosstabulation]

			Was the plan more or less reflective of public input?		
			More Reflective	Less Reflective	Total
Was the plan well-defined?	Yes	Count	4	3	7
		% within Was the plan well-defined?	57.1%	42.9%	100.0%
	No	Count	2	4	6
		% within Was the plan well-defined?	33.3%	66.7%	100.0%
Total		Count	6	7	13
		% within Was the plan well-defined?	46.2%	53.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.737[a]	1	.391		
Continuity Correction[b]	.090	1	.764		
Likelihood Ratio	.746	1	.388		
Fisher's Exact Test				.592	.383
Linear-by-Linear Association	.680	1	.409		
N of Valid Cases	13				

a. 4 cells (100.0%) have expected count less than 5. The minimum expected count is 2.77.
b. Computed only for a 2x2 table

Symmetric Measures

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.232			.391
Interval by Interval	Pearson's R	.238	.268	.813	.433[c]
Ordinal by Ordinal	Spearman Correlation	.238	.268	.813	.433[c]
N of Valid Cases		13			

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.
c. Based on normal approximation.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
What was the level of funding for public participation? x Was the plan more or less reflective of public input?	13	92.9%	1	7.1%	14	100.0%

What was the level of funding for public participation? x Was the plan more or less reflective of public input? [Crosstabulation]

			Was the plan more or less reflective of public input?		
			More Reflective	Less Reflective	Total
What was the level of funding for public participation?	Low level of funding	Count	4	4	8
		% within What was the level of funding for public participation?	50.0%	50.0%	100.0%
	Medium level of funding	Count	1	3	4
		% within What was the level of funding for public participation?	25.0%	75.0%	100.0%
	high level of funding	Count	1	0	1
		% within What was the level of funding for public participation?	100.0%	.0%	100.0%
Total		Count	6	7	13
		% within What was the level of funding for public participation?	46.2%	53.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.935[a]	2	.380
Likelihood Ratio	2.356	2	.308
Linear-by-Linear Association	.038	1	.846
N of Valid Cases	13		

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.935[a]	2	.380
Likelihood Ratio	2.356	2	.308
Linear-by-Linear Association	.038	1	.846
N of Valid Cases	13		

a. 6 cells (100.0%) have expected count less than 5. The minimum expected count is .46.

Symmetric Measures

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.360			.380
Interval by Interval	Pearson's R	-.056	.278	-.186	.855[c]
Ordinal by Ordinal	Spearman Correlation	.024	.287	.079	.938[c]
N of Valid Cases		13			

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.
c. Based on normal approximation.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Was participation early and continuous? x Was the plan more or less reflective of public input?	13	92.9%	1	7.1%	14	100.0%

Was participation early and continuous? x Was the plan more or less reflective of public input? [Crosstabulation]

			Was the plan more or less reflective of public input?		
			More Reflective	Less Reflective	Total
Was participation early and continuous?	Yes	Count	5	5	10
		% within Was participation early and continuous?	50.0%	50.0%	100.0%
	No	Count	1	2	3
		% within Was participation early and continuous?	33.3%	66.7%	100.0%
Total		Count	6	7	13
		% within Was participation early and continuous?	46.2%	53.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.040[a]	1	.308		
Continuity Correction[b]	.174	1	.676		
Likelihood Ratio	1.081	1	.299		
Fisher's Exact Test				.559	.343
Linear-by-Linear Association	.960	1	.327		
N of Valid Cases	13				

a. 4 cells (100.0%) have expected count less than 5. The minimum expected count is 1.85.
b. Computed only for a 2x2 table

Symmetric Measures

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.272			.308
Interval by Interval	Pearson's R	.283	.254	.978	.349[c]
Ordinal by Ordinal	Spearman Correlation	.283	.254	.978	.349[c]
N of Valid Cases		13			

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.
c. Based on normal approximation.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Was "complete information" provided to the public? x Was the plan more or less reflective of public input?	13	92.9%	1	7.1%	14	100.0%

Was "complete information" provided to the public? x Was the plan more or less reflective of public input? [Crosstabulation]

			Was the plan more or less reflective of public input?		
			More Reflective	Less Reflective	Total
Was "complete information" provided to the public?	Yes	Count	5	4	9
		% within Was "complete information" provided to the public?	55.6%	44.4%	100.0%
	No	Count	1	3	4
		% within Was "complete information" provided to the public?	25.0%	75.0%	100.0%
Total		Count	6	7	13

Was "complete information" provided to the public? x Was the plan more or less reflective of public input? [Crosstabulation]

			Was the plan more or less reflective of public input?		
			More Reflective	Less Reflective	Total
Was "complete information" provided to the public?	Yes	Count	5	4	9
		% within Was "complete information" provided to the public?	55.6%	44.4%	100.0%
	No	Count	1	3	4
		% within Was "complete information" provided to the public?	25.0%	75.0%	100.0%
Total		Count	6	7	13
		% within Was "complete information" provided to the public?	46.2%	53.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.040[a]	1	.308		
Continuity Correction[b]	.174	1	.676		
Likelihood Ratio	1.081	1	.299		
Fisher's Exact Test				.559	.343
Linear-by-Linear Association	.960	1	.327		
N of Valid Cases	13				

a. 4 cells (100.0%) have expected count less than 5. The minimum expected count is 1.85.
b. Computed only for a 2x2 table

Symmetric Measures

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.272			.308
Interval by Interval	Pearson's R	.283	.254	.978	.349[c]
Ordinal by Ordinal	Spearman Correlation	.283	.254	.978	.349[c]
N of Valid Cases		13			

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.
c. Based on normal approximation.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Was there broad outreach to the public? x Was the plan more or less reflective of public input?	13	92.9%	1	7.1%	14	100.0%

Was there broad outreach to the public? x Was the plan more or less reflective of public input? [Crosstabulation]

			Was the plan more or less reflective of public input?		
			More Reflective	Less Reflective	Total
Was there broad outreach to the public?	Yes	Count	6	1	7
		% within Was there broad outreach to the public?	85.7%	14.3%	100.0%
	No	Count	0	6	6
		% within Was there broad outreach to the public?	.0%	100.0%	100.0%
Total		Count	6	7	13
		% within Was there broad outreach to the public?	46.2%	53.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	9.551[a]	1	.002		
Continuity Correction[b]	6.413	1	.011		
Likelihood Ratio	12.203	1	.000		
Fisher's Exact Test				.005	.004
Linear-by-Linear Association	8.816	1	.003		
N of Valid Cases	13				

a. 4 cells (100.0%) have expected count less than 5. The minimum expected count is 2.77.
b. Computed only for a 2x2 table

Symmetric Measures

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.651			.002
Interval by Interval	Pearson's R	.857	.127	5.519	.000[c]
Ordinal by Ordinal	Spearman Correlation	.857	.127	5.519	.000[c]
N of Valid Cases		13			

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.
c. Based on normal approximation.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Was the MPO responsive to the public? x Was the plan more or less reflective of public input?	13	92.9%	1	7.1%	14	100.0%

Was the MPO responsive to the public? x Was the plan more or less reflective of public input? [Crosstabulation]

			Was the plan more or less reflective of public input?		
			More Reflective	Less Reflective	Total
Was the MPO responsive to the public?	Yes	Count	6	4	10
		% within Was the MPO responsive to the public?	60.0%	40.0%	100.0%
	No	Count	0	3	3
		% within Was the MPO responsive to the public?	.0%	100.0%	100.0%
Total		Count	6	7	13
		% within Was the MPO responsive to the public?	46.2%	53.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.343[a]	1	.067		
Continuity Correction[b]	1.364	1	.243		
Likelihood Ratio	4.485	1	.034		
Fisher's Exact Test				.192	.122
Linear-by-Linear Association	3.086	1	.079		
N of Valid Cases	13				

a. 3 cells (75.0%) have expected count less than 5. The minimum expected count is 1.38.
b. Computed only for a 2x2 table

Symmetric Measures

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.452			.067
Interval by Interval	Pearson's R	.507	.155	1.951	.077[c]
Ordinal by Ordinal	Spearman Correlation	.507	.155	1.951	.077[c]
N of Valid Cases		13			

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.
c. Based on normal approximation.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
What was the level of engagement achieved? x Was the plan more or less reflective of public input?	13	92.9%	1	7.1%	14	100.0%

What was the level of engagement achieved? x Was the plan more or less reflective of public input? [Crosstabulation]

			Was the plan more or less reflective of public input?		
			More Reflective	Less Reflective	Total
What was the level of engagement achieved?	Consulting (medium-low)	Count	0	7	7
		% within What was the level of engagement achieved?	.0%	100.0%	100.0%
	Involving (medium)	Count	2	0	2
		% within What was the level of engagement achieved?	100.0%	.0%	100.0%
	Collaborative (medium-high)	Count	4	0	4
		% within What was the level of engagement achieved?	100.0%	.0%	100.0%
Total		Count	6	7	13
		% within What was the level of engagement achieved?	46.2%	53.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.000[a]	2	.002
Likelihood Ratio	17.945	2	.000
Linear-by-Linear Association	10.448	1	.001
N of Valid Cases	13		

a. 6 cells (100.0%) have expected count less than 5. The minimum expected count is .92.

Symmetric Measures

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.707			.002
Interval by Interval	Pearson's R	-.933	.035	-8.605	.000[c]
Ordinal by Ordinal	Spearman Correlation	-.959	.035	-11.186	.000[c]
N of Valid Cases		13			

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.
c. Based on normal approximation.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Did the MPO use deliberation? x Was the plan more or less reflective of public input?	13	92.9%	1	7.1%	14	100.0%

Did the MPO use deliberation? x Was the plan more or less reflective of public input? [Crosstabulation]

			Was the plan more or less reflective of public input?		
			More Reflective	Less Reflective	Total
Did the MPO use deliberation?	Yes	Count	6	0	6
		% within Did the MPO use deliberation?	100.0%	.0%	100.0%

	No	Count	0	7	7
		% within Did the MPO use deliberation?	.0%	100.0%	100.0%
Total		Count	6	7	13
		% within Did the MPO use deliberation?	46.2%	53.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	13.000[a]	1	.000		
Continuity Correction[b]	9.288	1	.002		
Likelihood Ratio	17.945	1	.000		
Fisher's Exact Test				.001	.001
Linear-by-Linear Association	12.000	1	.001		
N of Valid Cases	13				

a. 4 cells (100.0%) have expected count less than 5. The minimum expected count is 2.77.
b. Computed only for a 2x2 table

Symmetric Measures

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Nominal by Nominal	Contingency Coefficient	.707			.000
Interval by Interval	Pearson's R	1.000	.000	5.100E8	.000[c]
Ordinal by Ordinal	Spearman Correlation	1.000	.000[c]		
N of Valid Cases		13			

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.
c. Based on normal approximation.

VITA

Unwanna Nicole Bellinger Dabney was born on June 23, 1974, in Orangeburg County, Virginia, and is an American citizen. She graduated from Orangeburg Wilkinson High School, Orangeburg, South Carolina in 1992. She received her Bachelor of Science in Civil Engineering Technology from South Carolina State University, Orangeburg South Carolina in 1997 and subsequently worked as a planning engineer and transportation planning manager for the Virginia Department of Transportation in Suffolk, Virginia. While working full time, she received a Master of Public Administration from Old Dominion University of Norfolk, Virginia in 2000.

WORK EXPERIENCE

Federal Highway Administration, North Carolina Division Office 2009 – Present
Raleigh, NC
Planning and Program Development Manager

Manage the Planning and Program Development Unit in the North Carolina Division of the Federal Highway Administration. Serve as the Division's chief planner responsible for delivering the statewide Federal-aid Highway Program in the areas of planning, air quality, congestion management, research, and intelligent transportation systems (ITS).

- Provides leadership, coordination, and authoritative advice to top State officials, Metropolitan Planning Organizations (MPOs), and local officials in the development of cooperative relationships resulting in the formulation and execution of progressive and comprehensive programs that meet State and local needs.
- Determines the adequacy and approval of the Statewide Transportation Improvement Program (STIP) that serves as the program control for nearly all Federal-aid highway project approval actions for the over $1 Billion annual statewide program.
- Serves as the Division's lead authority in the areas of climate change adaptation and mitigation, sustainability, and livability and leads the development of the statewide climate change vulnerability assessment for transportation infrastructure.
- Oversees multimodal systems operations planning, freight planning, and the development of congestion management performance measures for statewide and regional transportation networks.

Federal Highway Administration, Virginia and Puerto Rico Division Offices 2005 – 2009
Richmond, VA
Transportation Planner

Provided federal oversight for the transportation planning processes for metropolitan regions in Virginia and island-wide and metropolitan planning programs for the Commonwealth of Puerto Rico and the U.S. Virgin Islands (the later from January 2008 to December 2009). Regions of responsibility included the Northern Virginia portion of the Washington, DC area, Hampton Roads, Fredericksburg, Charlottesville, Petersburg, Lynchburg, Danville, Roanoke, and Blacksburg as well as San Juan and Aguadilla in Puerto Rico and St. Thomas, St. Croix, and St. Johns Islands in the U.S. Virgin Islands.

- Provided technical assistance and authoritative advice to state, regional, and local officials for the development of Statewide, Metropolitan, and Territorial Transportation Improvement Programs (TIPs) in Virginia, Puerto Rico and the U.S. Virgin Islands.
- Managed the Air Quality Conformity process for the San Juan Non-Attainment area.
- Completed environmental documents for the Lynchburg District of Virginia to ensure projects meet the requirements of the National Environmental Policy Act (NEPA).
- Managed transportation data information programs including the Highway Performance Monitoring System, and Vehicle Size and Weight Program for Virginia and Puerto Rico.
- Successfully oversaw programming of American Recovery and Reinvestment Act (ARRA) funds for both Virginia MPOs and the Island-wide program for Puerto Rico.

Virginia Department of Transportation (VDOT), 1999 – 2005
Hampton Roads District, Suffolk, VA
District Transportation Planning Engineer/ Engineer Manager II

Managed the Transportation and Mobility Planning Section for the Hampton Roads District. Responsible for the management of the District-wide planning program and a staff of eight including two senior engineers, three engineers, one technician and one office administrator.

- Managed and oversaw the Long Range Metropolitan Planning Process, rural planning, and multimodal planning for the region. In support of planning programs, served on several local, regional, and statewide committees.
- Led regional efforts for High Occupancy Vehicle (HOV) system planning and operations.
- Managed the Site Plan Review Process for counties in the Hampton Roads region and initiated the development of a GIS tracking system for land development trends in rural counties.
- Oversaw traffic forecasting, plan review and other transportation planning related project development tasks for projects in the Virginia Transportation Development Program and participated in Transportation Corridor Studies, Toll Studies, and ITS initiatives.

Virginia Department of Transportation (VDOT), **1997 – 1999**
Hampton Roads District, Suffolk, VA
Transportation Planning Engineer Trainee

Trained with Transportation Engineers in various engineering divisions in preparation for a position in project management. Gained knowledge, skills and abilities in road location and design, construction materials, bridge engineering, traffic engineering and environmental impacts, as well as performed work with intergovernmental agencies analyzing political impacts on agency at the state level.

EDUCATION

Doctor of Philosophy, Public Policy and Administration (2013)
Virginia Commonwealth University, Richmond, VA

Master of Public Administration (2000)
Emphasis: Urban and Regional Planning
Old Dominion University, Norfolk, VA

Bachelor of Science, Civil Engineering Technology (1997)
South Carolina State University, Orangeburg, SC
Cum Laude Graduate

CONTINUING EDUCATION

Associate's Certificate in Project Management (2009)
George Washington University, Washington, DC